

ATARI

COMPUTING

Issue 2 • December 1996

£3.00



Image Processing
Positive Image & Photoline

Text Crunching
Papyrus v4 hits the UK

Exclusive
Reader Disk Software

On-line
Animated CAB & NeST

Desktops
Atariphile Round Up

Reviews: Positive Image • Photoline • Papyrus v4 • Sound Chip Synth

THE UPGRADE SHOP

TEL 01625 503448

HI RESOLUTION MONO MONITORS

T.U.S. 14" MONO

T.U.S. 14" Mono monitor for ST series. High resolution picture for Colour, Mono etc.

WITHOUT SOUND

£94.00

WITH SOUND

£109.00

ALL MONITORS INCLUDE APPROPRIATE CONNECTING LEADS AND A TILT AND SWIVEL STAND

TOS 2.06

TOS 2.06 is the enhanced operating system from AT&T for the entire ST range. Improved desktop including full keyboard control of windows, plus programs on the desktop for easy launching, or single function keys to launch the required program. Features give access to all TOS systems for complete compatibility. All units supplied with full fitting instructions and manual.

STC VERSION 2. £10.95

TOS 1.620.95 supplied complete with disk read/write

ST/STFM. £15.95

For additional versions please ring

HIGH DENSITY DRIVE MODULE

Exchange data easily with other platforms by giving your ST the ability to read and write to high-density 1.44MB discs. Fully automatic reading capability depending which type of disc has been placed in the drive. Comes complete with software drivers and high density recording software. 1.44 or above required for high density support.

HIGH DENSITY MODULE £15.95

HIGH DENSITY MODULE AND 1.44MB DISC DRIVE £24.95

TOS / HIGH DENSITY SPECIALS

STC TOS 2.06 WITH HIGH DENSITY DRIVE AND CONTROLLER

£19.95

STFM TOS 2.06 WITH HIGH DENSITY DRIVE AND CONTROLLER

£26.95

CHEETAH HARD DRIVES AND CD ROMS

THE CHEETAH DRIVE FROM T.U.S. DEVELOPMENTS OFFERS AFFORDABILITY AND STYLE TO AT&T SYSTEMS. SMALL CASE DIMENSION WITH BUILT IN POWER SUPPLY, CIRCLING FAN, DUAL SCSI EXTERNAL CONNECTORS (FOR DAISY CHAINING EXTRA DEVICES) AND IN SELECTOR GIVES A FULLY FEATURED SYSTEM FOR USE ON MORE THAN JUST AT&T COMPUTERS. ALL SYSTEMS ARE SUPPLIED COMPLETE WITH HOST ADAPTER CABLE AND FORMAT / PARTITIONING SOFTWARE AND ARE PRE-FORMATTED AND PARTITIONED READY FOR IMMEDIATE USE.

80MB....£159.00 270MB....£219.00 540MB....£289.00

ADD £10.00 TO HARD DRIVE PRICES IF LCD, LINK II CONTROLLER REQUIRED

PARTS REPAIRS AND FITTINGS

NEW PARTS

Full 12 month warranty. All parts are tested before despatch

INTERNAL REPLACEMENT DRIVE KIT

For any ST with INTERNAL drive. High quality mechanism, with stands for old ST if required

TMS or T800 drive supplied £34.95

POWER SUPPLIES

New PLUG IN replacement. includes power switch and main connector. no soldering required £30.95

200K EXPANSION

With free mouse mat £31.95

ST/FALCON SPEAKERS

Stereo speakers with leads. £19.95

MONITOR £29.95

REPAIRS AND FITTINGS

Fully tested engineers for a reliable repair. All parts quoted for individually (no fixed price). 48 hour turnaround on most machines. Long 4 month warranty as standard. Courier collection and return available for £14.95

We can fit any of the advertised products to your machine for a one off fitting charge of £15.00. This means that if you require say an upgrade and high density drive fitted then the charge is only £15.00

Please ring for an appointment before bringing your machine or call if courier collection is required. Please ensure all parts selected are adequately packaged

CD ROM DRIVES JUST ARRIVED CALL FOR SPECIFICATION AND EXCELLENT PRICES

ATARI MEMORY BONANZA

STe / Mega STe
1/2meg.....£10.00
2meg.....£34.00
4meg.....£67.00

STFM MARPET
1/2meg.....£28.00
2meg.....£52.00
4meg.....£85.00

2meg TUS memory boards for ST(FM) few left at £44.00

All kits are supplied with comprehensive fitting instructions, testing software and a free disk of useful PD/shareware utilities. Free technical support is available, as is a competitively priced fitting service.

T.U.S. FAX MODEMS

T.U.S. 14400.....£89.00
14,400 VOICE/FAX AND DATA MODEM.
Class 1 fax commands, full Hayes
compatibility.

T.U.S. 28800.....£149.00
28,800 FAX DATA MODEM.
Class 1 + 2 fax commands, full Hayes
compatibility.

**BOTH MODEMS ARE BABT APPROVED WITH 'CE' MARKINGS, COMPLETE WITH
CABLES AND SOFTWARE FOR BULLETIN BOARD ACCESS**

COMA.....from £46.99
FAX SOFTWARE

SERIAL PORT.....£29.00
Upgrade letter STFM AND STe

***** NEW PRODUCTS ***** ** EXTERNAL KEYBOARD / CLOCK CARTRIDGE **

EXTERNAL PC KEYBOARD INTERFACE FOR THE ST(FM) OR FALCON £39.99
PC KEYBOARDS FROM £12.99 CALL OR WRITE FOR DETAILS

EXTERNAL CLOCK CARTRIDGE FOR THE STe. £22.99
DOES NOT TIE UP THE CARTRIDGE PORT. SIMPLE PLUG IN AND RUN

All prices include VAT & £1.25 for postage delivery (within the UK and small parcels, see below). Orders can be placed by TELEPHONE (quoting credit and details) or by MAIL ORDER, please make cheques and postal orders payable to "THE UPGRADE SHOP". 1 year warranty on all products (subject to wear and tear). 4 Months on upgrade. Prices subject to change without notice.

**UNIT F2, VENTURE HOUSE, CROSS STREET,
MAICLFSFIELD, CHESHIRE, SK11 7PG**

MONDAY - FRIDAY 9:00AM - 6:00PM SATURDAY 9:00AM - 2:00PM
SAME DAY SERVICE AVAILABLE FOR UPGRADES AND MOST REPAIRS
PLEASE RING BEFORE YOU BRING
ACCESS DELTA MASTERCARD VISA SWITCH

DELIVERY CHARGES

Small items under £10.00 please add £1.00 P&P
Large items and orders over £10.00 add £3.00 delivery charge. Courier Pickup for Upgrades and Repairs £3.00

卷之三

ATARI^{II}

COMPUTING

Author: Bill Brantley

Editor: Jim Edwards

What have I learned?

Information Systems and Methods

2002 Team: Brian Hartline, Joe Crotzer, Al Gosselink, Andy Kline, Sandy Thompson, Mike Kornblau, Paul Kuykendall, Joseph Kornblau, Chris Gosselink, Jim Holly, Bryan Holly, Norman Husted.

REFERENCES AND NOTES

QUESTION 10: All citizens, adults, teenagers and general responses along with letters and groups mentioned should be addressed to the following points:

Alastair Campbell, "Boss Britain" Downing Street,
10 Downing Street, LONDON SW1A 2AA, UNITED KINGDOM
Email: alastair.campbell@10downingstreet.gov.uk
Phone: +44 171 230 3000

Relationships with clinical practice from personal correspondence by members. After relevant questions although we will randomly select one to help you through the Q&A section of the discussion, it would also be helpful if you can demonstrate responses and clinical material from an ongoing project within the same category. Ideally papers and editorial comments should be no more than 1000 words.

Asian Computing is published by the East
Springer Group (ESG). Whilst every care is
taken in the preparation of this magazine, neither
the publishers nor the ESG can be held legally
responsible for any errors. The views of
contributors are not necessarily those of the
editors or publishers.

Most European responses will suggest that trademarks, when possible, are best acknowledged by the copyright holder. In part this guidance may be repeated, except in any form of material system or organization to copy them by any means, mechanical, electronic, or otherwise without the express written consent of the RTRPI.

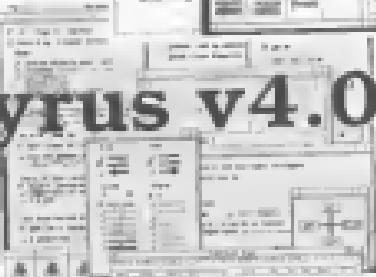
All rights reserved. Publishing Information is on the
inside page. Copyright © 2007 by ALEKS.

Copyright images and publications are from the
Balfrey supervisory panel, and are © 2002 Balfrey
Universidad del Cine and its licensees.



Papyrus v4.0

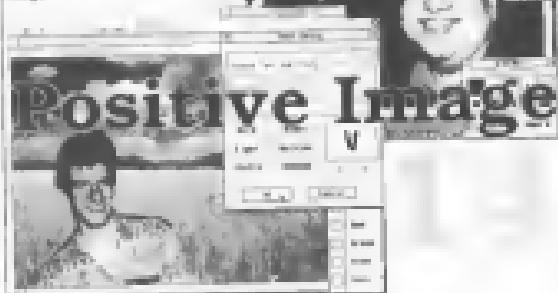
In table 1 of the
original document
published in *Health*
is finally available—
but was it worth the
wait?



Battle of the Desktops



You'll cover trend & resistance again after reading our in-depth review of positive psychology.



FEATURES

- 11 Show report
- 21 Introduction to NeST
- 22 Hard drive primer
- 26 Introduction to MINT
- 36 Program failures and crashes
- 38 Atari user group
- 39 User group news
- 40 Atari Wrinkles club
- 50 Maggie
- 52 Atanophile



REVIEWS

- 18 Lottery companion v4.0
- 20 Sound Chip Synth
- 28 Jaguar CD
- 31 Atari Karts
- 34 Photoline



SHAREWARE

- 43 CAR
- 44 MGFT?
- ST News
- 46 STOS compiler fixer
- ZControl
- BPM
- 47 PlaySID
- DumpIt
- GEM-REC96
- 48 Bad Mood



REGULARS

- 6 News
- 10 Letters
- 42 Reader disk
- 48 Reader offers
- 58 Subscriptions
- 59 Questions and Answers



CONTENTS

HAPPY DAYS

We've had a sleepless planning session since our launch at the September show. We sold out of magazines around the 10th both days! After disappointing people at the show and during the following week we decided to reprint Issue 1. This took several weeks to organise and resulted in delays for everyone who placed their order after the show. This issue was our first run tested from our first print machine and the page count varied in the pages!

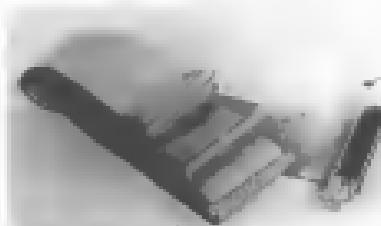
Thanks for all your letters of encouragement and offers of help which have helped maintain our enthusiasm as the deadlines approach and panic sets in. Following on from the success of Issue 1, bearing in mind Atari Computing is put together by enthusiasts in our spare time we have had to restructure the AICD to cope with the overwhelming demand. This means the contact points have been changed, please send the masthead for details. The survey forms are still coming in and first indications are encouraging. It seems you like the mag! Due to an overnight mail strike, readers haven't had their say yet, so we've decided to print the survey results in AICD 3.

In behalf of the AICD I'd like to thank each and every contributor for devoting their time and enthusiasm for our benefit. We believe this issue has turned out even better than AICD 1 and look forward to receiving your comments. We wish you all a happy Christmas and a prosperous New Year.

Joe Conner

THE NEWS

Atariiga Synthesis Projects (ASP) boards rule the scene



The SCSI/Board is a new product from this new company. It fits into a standard PC case of any normal configuration (Mother board etc) and allows an external SCSI device enclosure like the Atari ST (filled with an SCSI/SCSI converter) to use internal PC SCSI devices. External SCSI devices such as hard disk, tape drives, CD-ROMs and removable media are more expensive than their internal equivalents. The SCSI/Board costs from £199 for four basic three internal connectors or £499 for a full external connection. It is also possible even for a standard board disk plus CD-ROM usage. The other advantage is a welcome reduction in the "Computeraphobia" behind your machine because PC users typically have a PWB through socket for connection to another main power source. Telephone: Telephone: Atariga Synthesis Projects (ASP) on 041 212 52412.

The Hades - an Atari Super Computer?

Brought into Britain by System Solutions, the Hades 020/030 is probably the latest TOS-based computer on the basis of the parts available in both SCSI and SDD5 flavours (for SCSI and SDD5 respectively). The Hades features a vast array of ports and interfaces that can take an overwhelming selection of input and output devices. The Hades is the first TOS-compatible computer to possess a PCI slot. PCI being a exceptionally fast bus which enables input and output of data to and from devices like graphics cards and SCSI ports. The access speed fast

access to all of your peripherals. While building the Hades, the designers have kept TOS/104 compatibility very much in mind. The Hades features a VME bus for example and MDA monitor, LPT printer ports etc. everything you'd expect on a standard Atari (with the exception of a cartridge slot). The summary is another case in point. Although you can install up to 12 1 GigaByte (yes, really!) SCSI single tape is used by the operating system (a modified TOS 3.00) as ST RAM - albeit running at TT RAM speed! In pure speed terms, the SCSI model is equivalent to a 386DX in Pentium. A truly professional system for the most demanding of Atarians. System Solutions tell us they are able to build Hades systems to the customers' exact specifications. So if you've got deep pockets then give them a call on 031 381 3350. At the same time could you feed us a review?

Technical Specs. Internal

- 16 PC Bus
- 16 ISA Bus
- 16 VME Bus
- 16 SCSI (enhanced IDE) with a maximum 1.6GByte for two drives
- 16 SCSI with a maximum 4MByte for 1-7 drives (TT compatible)

External

- Monitor 1 (25 way D-Sub) with a maximum 19,200 baud
- Monitor 2 (25 way D-Sub) with a maximum 150,000 baud
- Serial 1 (9 pin Mini DIN) with a maximum 150,000 baud
- Parallel (25 way D-Sub - Falcon/TT compatible)
- Modem (16 bit)
- PC Keyboard connection (standard)
- Mouse and Joystick (Atari compatible)

Magic World

In a number of new releases this month System Solutions have brought out several products for their Magic operating system - Magic. Firstly we have an update to

the current operating system, taking it to version 3. It offers (over version 2) improved compatibility, long distance support, multi-threading support for DOS (concurrent programs) or windows support for DOS compatible partitions, an enhanced desktop and lots of smaller changes and updates. Upgrades available now for EISA/Magic PC is also now available. It is the Magic operating system ported to EISA compatible computers. In less technical jargon "If I tell you run Atari software on your PC" You'll need a fast PC to run Magic PC on, as you're simulating 68000 power on Intel processor. It takes a lot of power. System Solutions recommend a 486 33MHz 100+MHz 4 processor - but we suspect you only get the best from the emulator on a Pentium system. Magic PC runs as a window inside the Windows 95 desktop and is fully multithreading. It offers resolutions in say three going up to 16 colours. For about you need MMX PC. It gives you direct access to all your system peripherals but, like MagicOffice, as there's no graphics port there's no way to run graphics protected software like Cubase. As mentioned above, MMX PC is also available. This greatly enhances the display speed of Magic PC, as well as giving access to vector line technology (GDI8 printing etc). It also enables Magic PC to run in screen modes greater than 16 colour (24, 32, 64-bit and 24-bit colour are all possible). Magic PC runs EISA, with MMX PC at 486 20. However a bundle price is available for 33MHz. There are also a range of optional upgrades, custom-made and bundle prices available. Call System Solutions on 011 212 52412.

TrueAmiga Velocity

True recently announced some much awaited statistics showing the TrueColor resolutions possible with their Falcon accelerator, the Nomad

Palms with Nomad at 160x120x16 - all are non-interlaced resolutions (that is 256 colours per row) versus a standard 16" VGA non-interlaced. With a half-decent monitor, it can be expected that even higher resolutions can be used.

CPU	Video Refresh		
Base	CPUs	Base	CPUs
486/40	24	24	60
740/100	24	24	60
750/100	20	20	60

When used with their powerful image processing software, the results must be pretty special! What makes this possible is the solid 20MHz bus performance of the Neurone board. In fact, the results:

performance is not to the best of it and conventional memory for the screen. However, what makes this support of information even more interesting is the software that TGA and VESA have in mind. In general, these extended resolutions. It is called *Virtual* and the intention is to take the current display of ScreenSaver and *BlowUp* to task. *Virtual* was originally developed to support *ScreenSaver* for the emerging high resolution displays and a portion of the code will be supplied with that program to help part of the complete

Healthcare train - APEC Asia "Fidelity and Neutrality" We also expect fidelity to become a "must have" option, particularly for Medicaid waivers but also for payers. Paying a standard Medicare without providing especially for health insurance.

switching and there may be flags that are apparent in TDS, including some anomalies that seem to exist in NDS. Bellary has to be constrained by local resolution settings which are apparent in other terrain expanders. Velocity allows fast operation and complete flexibility in all operations. Price and availability are yet to be determined, but if you are a Falcon user it is certainly easy to local call for Telia (a local no +44 (0)191 999-

Inexpensive Hwy Colour Printing on the Horizon.

The one thing that has current digital based colour printers down is the fact that ink is wet or rather that the ink makes the paper wet. Causing slight distortion and bleeding. The alternative, colour laser output is still substantially expensive and liable to stay that way at least into next year with this increased in all things graphical. This Designa have been looking into the newest crop of "Micro Dry" printers. What they've told us is enough to make even the most sceptical of us take a closer look. Colour printing at 1000x1000 dpi using this completely dry workflow gives photo-realistic output on standard paper and micro-vein output (at a staggering 1000x2000 dpi) in sharp and crisp. In addition the printer is able to output upon demand in a range of metallics like Gold, Silver, Cyan and Magenta and be available normally for £10 a page. CMYK cartridges (the standard colour cartridges) will be

\$7.95 each with the printer resulting for a reasonable \$16.00. We will definitely be keeping an eye on this road.

卷之三

HD Driver, now at version 6, has become the de-facto standard for hard disk drivers on the Amiga over the past few years. If you're an owner of HD Driver then you'll be glad to know that System 6 includes the just-released v6. A range of recuperative upgrade options are available, and that at £29.95 HD Driver is particularly costly in the first place. Version 6 offers a much refined interface, easier to use and more intelligently grouped functions. There is now a highly configurable disk formatting mode - including support for media with different physical sector sizes and unpartitioned drives. The partitioning has also been revamped, consisting now of native DOS/Amiga compatible partitions, delete individual partitions, repair partitions, etc. In addition there is a new Amiga Configuration option, which automatically tells the driver which drives are connected to your computer. If you're upgrading from an earlier version of HD Driver there are even more new features to look for. The file is huge (about 250K to be completely honest), but here are just a few:

For integrated DMA with MagiC® 4 (see previous) which enables MagiC to generate realistic 3D scenes, click [here](#).

• Planned giving. Be citizen

- Party checks on THD and THDnew
- Partitions above 10G on the AD32 port (Magic 4G required)
- REMM/AD32 program emulates a media change for removable drives which do not properly tell your computer when you change disk.
- CMIFD is included to fix a Edison hardware bug which can cause problems with Edison Audio
- Partition Assignment enables you to slice drives into AD32 SCSI and IDE disks
- Enhanced support for removable media
- Support for Phase-awaiter Drives (ATA)

3100 電子商務

Horrible Housewife

DETERMINING AN ALIAS
Are we about to see a pre-emptive
Web browser war developing on the
Mac? Akin to the point-on-between
NetScape and Microsoft on the PC?
Web probably not. Mac owners are
more sensible aren't they? But
there's no denying that a lot

• [View All Events](#) | [View All Guests](#)



Atari platforms. We don't know too much about the progress so far, as screen grab was delayed under our noses less than 26 hours before we went to press - but we decided it was well worth including in this latest news. If you're an on-line Atarian (and if not, why not?) then we think you'll agree this is very good news for the future of the Atari Internet.

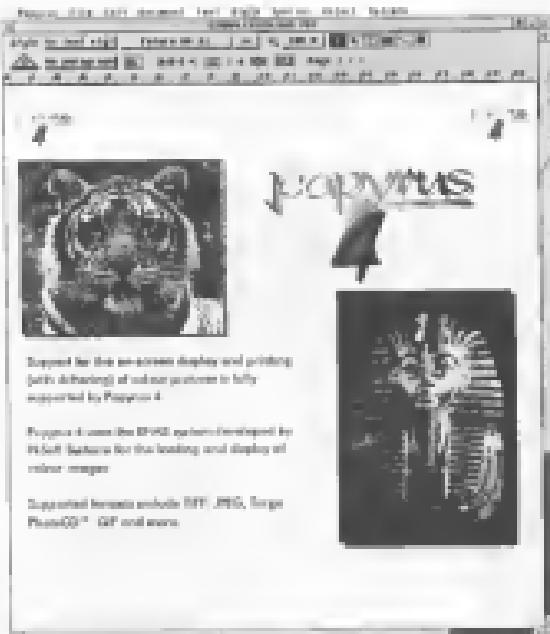
Papyrus v4 at last!

After what seems an age, Papyrus v4, the superb word-processing package is now with us - and we think you'll agree it's been worth the wait. Atarisoft continue to scratch their collective heads on the field most usable of interfaces to give a better feel and even more functionality. The mouse has enabled the author to optimise the code further, providing greater speed and compatibility. You know that everyone keeps on mentioning "well-written OEM programs" with regard to new operating systems? Well, Papyrus is that program! This version of Papyrus is also the first to offer full colour support, in any orientation and colour mode. That includes colour output - just in time to serve the needs of the new array of affordable, high-quality, colour

printer owners. To complement this, Atarisoft claim Heats have added their own XPSL system to Papyrus, enabling you to load in a wide range of graphics formats. A number of annoying limitations have been removed - for example, there is now no (perceived) limit to the number of visits to the Internet Papyrus can use. It is also much better at saving and handling long documents and the search speed has been greatly improved. In addition, all copies of Papyrus v4 including upgrades come with a CD packed with 200 fonts. For those using low-resolution palette domains - or worse, incomplete shareware - these fonts come directly from the Bitstream type foundry and are at the highest quality. Upgrades are available for \$49.95 from Heats and other Atari dealers. The full package costs \$99.95.

Atari Friendly Scanning Service

Papyrus have just announced a photo scanning service aimed at Atari owners without CD-RW's. They will take your photographs (3 minutes, up to 100's) scan them into either GIF, TIF, JPEG or BMP format and send them back to you. The charge per photo is \$1.50, with set postal fees.



Papyrus 4.0 has support for the on-screen display and printing (with buffering) of colour patterns in fully supported by Papyrus 4.

Papyrus 4 uses the EPSON system developed by P-Soft Software for the loading and display of colour images.

Supported formats include TIFF, JPEG, Large PhotoCD™, GIF and more.

at \$1.25 in the US, going up to \$2.25 in Europe and \$2.60 to the Rest of the World. While this service is aimed mainly and squarely at home owners, why won't Heats offer a free sample to their Atari? Flappyshop's website, Steve Delaney is happy to talk to any interested graphics professionals with more demanding needs. You can email him on steve@flappyshop.com or call him on +44 (0)1244 562626. Sunday, Wednesday and Thursday between 9am and 5pm.

Snippets

Flappyshop - Positive Image 1.12 now available. This release has a few bugs and adds loading of compressed BMP images and right support for Nokia graphics cards. In addition, all new versions come with a 68040 processor-friendly version that takes advantage of special coding techniques for the new breed of Atari clone.

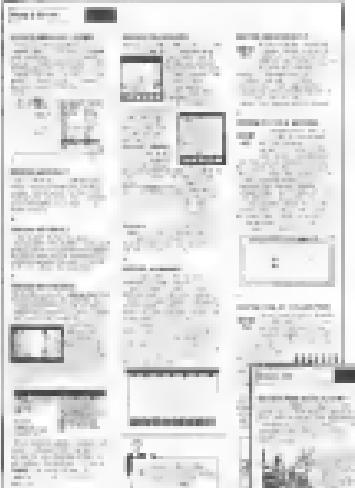
System Solutions have a T1000 expansion available to enable you to use standard T1000 under the Magic PC emulator. This gives even greater compatibility as much as 90% of game are playable on the PC! Naturally System Solutions will not be giving out versions of T1000 on disk you'll have to have your own Atari to run it from.

Another new Atari clone will soon be available. The Phoenix, from France, will sport either 480KB or 880KB processors and a Z80 chip. Very little is known about the computer at this stage but it sounds pretty powerful and will be built at a price competitive with other clones. We'll keep you posted.

Year play from 10/92

16/22 have recently signed deals to distribute Years from Impact Software Solutions and Observations from Unique Developments and Multi Brick, a Breakout clone from France. All four games run on ST/Falcon machines and are expected to retail for \$19.95. Contact 16/22 on +44 (0)803 210788.

New Design May not be unique to us the second issue is on. Atari Computing, 200a Station Avenue, Croydon, CR1 5EE, SOUTHERN ENGLAND. Email atari@compulogic.co.uk or Tel +44 181 4502111. Subs £1.



the Atari

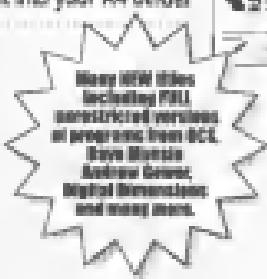
Reference Guide

to public domain and shareware

The comprehensive new printed guide to all the very best PD & Shareware

Split into 9 main sections, with sub-sections and a full alphabetical index.

Supplied in loose leaf format, pre-drilled, ready to fit into your A4 binder



Many NEW titles including FULL annotated versions of programs from AOL, Dave Morris, Andrew Morris, Digital Dimensions and many more.



Still Only £1.50 Per Disk

Tel: 01782 335650 - Fax: 01782 316132
Visa, Mastercard & Switch Accepted, or send your order to
Goodman's

4-Carried Close, Mole Hill Estate,
Langton, Stoke-on-Trent, ST3 1SW



UK P&P - Order value below £10 add £2.25, above £10 add £2.50



ONLY
£2.95
Plus P&P

Order 3 delivery names



Letters

First I must say it is nice to see articles on real computing. I've often felt previous magazines aimed too much on games ignoring operating systems, printers, MDT, BBS etc. It's not just me, but much of my audience - just one of the reasons I stopped buying every issue. Two problems I have looked and looked again but cannot see any acknowledgement whatsoever. Is this an oversight or a policy decision? Also, in the same issue, it was unclear where I should enter a reader's card from. There are plenty of addresses on page four but which one do I use? Keep up the good work.

John Lawrence via the Internet

Err, we have an article on writing up MDT and AFS replacements in this issue. It is both practical and of relevance as I don't understand your point, please explain... The subscriber information in this issue is on page 56. Evaluation copies of issue 100 should have included an separate information sheet - subscribers will automatically be invited to receive their subscription.

I saw I issue last week and felt I had to do a more practical and straight to the point article or flagged comments in this issue on the issue for my three daughters. Problem is an understanding with a "you get one free review" reader instantly raised just above. This is a real professional publication targeted at the casual end user and to have the support from AFS at this stage in the game is staggering. I've changed my earlier article slightly since the days when I used to write to Sir Leonard and Andrew Wright, condemning poor reviews because I thought these - and article that I can offer a great deal more potential than passing a system across a screen. I believe full coverage of all areas of interest and ongoing support for the Macintosh areas are vital to maintain interest in our platform. For me, the Adam platform is about generally educated people without imposed version and restrictions and so on. I still respect Macintosh as a computer in the people who had the sheer guts to get it up and running but can add my plus that we as enthusiasts can get actively involved by

making contributions to AFS to ensure its continued success. That's about it for this and had I would like to float an idea. How about an AFS Foundation with funds on training days? It could have practical workshops including topics such as: How to get on line

(see 'Editorial' section).

I was looking forward to AFS 100 with a mixture of anticipation and a certain degree of anxiety because it's after and the issue would finally put the bug to paper. Thank you for giving it. I really enjoyed your plug for what you say did for Macintosh. First because it was a challenge to start a magazine in an area where the biggest talk up in my head goes up second because you have put together the foundation which connects us as regular users, the status community of Adam enthusiasts in the UK and in other countries.

John Lawrence via the Internet

But the issue also disappointed in not having nearly like this when I expected, as well as for obviously replaced the titles when we replaced AFS 100. Happily most of the editorial content is based on that. I had the last two issues in the pipeline but I will add one or two more pages, if it just goes?

But in total I've not used a single word from either for body text but restricted to pictures after much discussion. We like it so much we get a series of letters asking us to change or print them to add a few pages at a time there have been a couple of these magazines with prints as from longer and this word.

Two comments I would like to be more sure about overtake the first issue both on the UK and worldwide. The support which was good, how about advertising in the editorial part? Do you plan opening a BBS or a BBS section? Some general

advice or clarity? That's all for now. But I've had loads written. I keep my fingers crossed for you.

Steve Nutall, Part 1 Press

Ed: We include anything newsworthy and we'll expand coverage of interests. Our editorial coverage is dependent on our subscribers' contributions and although I try to maintain a balanced magazine it isn't their money. We're considering adding a Reader's Area section but due to the extended period between issues or lack of understanding of its value, perhaps not at present. Watch this space though as I'm happy to try to keep to them...

Advertisement

Following the recent Disney programme feature I decided to take a break from the cartoon panel and the like to 21/29 just the title is 20/12/93 and switched the clock & date to 00. I turned the computer and checked the No creation date which was correctly shown at 11/00. I tried sorting by date and that also worked perfectly. This platform is good for another 100 years!

Ian Smith via CH



countries - even foreign (unfortunately) people like me who have had regular and satisfied subscriptions to ST Review, Amstrad User and 3D Format over the years. When I opened the magazine, my first reaction was disappointment: no bright colours and no glossy paper! On reflection I realised I had missed the point. When I actually worked on the contents of the Spring of a magazine, I almost did not want to know what other people are still using this machine of ours and was not going to use it for at least another couple of years. What I have had off is for this magazine to review and with this journal the audience appears to be less interested than the contents. Now a couple of criticisms - possibly I'm being?

• If you want to stay in black and white you'd be foolish with exception I know which are plain grey (AFCN page 10).



I wonder if Atari Computing will still be around?

Letters and editorial contributions should be sent to **Atari Computing**, 69 Mill Road, Chelmsford, Essex CM1 5AJ. Email: ac@atari.com

Goody two Shows!

Two days ago, sponsored by Goodwin International, book plates featuring 2004 September in Birmingham and October 15th in London back when we were planning the launch of A&B Computing, we sent these plates as the first local signs of returning a future for the magazine and we're delighted to report we completely sold out stock at both shows.

For the first time in many years the
show had an atheist led on it, who subsequently
walked up with over 400 through the doors in
Brentwood and over 300 in London.
Almost every 100 people with an interest in
the most remarkable book is a atheist.

After Goodwin, MD of *Condition International*, got in touch months back to broker the shares a reading I asked him for this message after the event: "Apart from reading the *Condition* for sales talks in London, there were no audience problems—except to my trumpet and violin! After requests from all quarters I can honestly say I would do it again and I'll see you all at the next show again."

Mak's new stand-off coating track in PV/fluorocarbon disks and coil of the continental software. Copies of the excellent CAD program *Technics Cadline* were also for £47.50 (postage £2.50 free UK). If you fancy a *Macromedia* 3D version you can get £12.50 the software. Distribution is available at £20.00 a roll, which is £10.00 more than the *Macromedia* version.

On next the broad seminar to be organized by the mixed units of the two groups - power without the price to the world.

Ireland was represented by Scotland's USAF Army Group (USAAG). Most of the committee and staff members made the long haul south to Birmingham and a few even continued down to London. They assumed the USAAG's staff, received a few more members and started planning and line friendships began to form. An initial USAAG chairman selected. "Those influences of Scotland, those early contacts" (1981).

The *Winey* age has come (A.D. 1970) with lots really happening demonstrating the joys of living on the high-spirited all-things-winey/Vinous Shambang and Vinous B&B. The entire winey community has benefited from these efforts and people have already started jumping on the winey wagon since the 1980s.

The Spanish Solutions, based presented plenty of staff and machinery and were showing off their products to good advantage. Megapac® PC was available for the first time in the UK and a range of Megapac® 95 and Megapac® 8 were being off the stand. Tandem was publishing a dramaticalized HMDI/HDMI off was available and a lot of people seemed to be interested. The Toshiba's life integrator 3, the DLP projectors DS-8000 and the Ultimate Colour CO-8000, Kuro Earth science from Spanish Solutions, was giving the the Toshiba's CO-8000, showing off and display his new baby the Toshiba Projector 8000.

ANSWER



well along with its new *Calculus* that will appear posthumously by Dover. Harvard University Publishing, which looks great but is probably several years too late to make any real impact. Copies of ST Applications are out now, what masterpiece could last long otherwise?

Proprietary brand food products (cereals, soft drinks, confectionery, etc.) account for 20% of manufacturers' price (20%), approximately 6700. The trend was well predicted with a reasonably packaged product of these categories (confectionery and cereals) giving 10% of the total sales of these categories as recorded in 2000.

[16] [2] had the most comprehensive collection of games by all four countries. Other specialists included Rodriguez & Rodriguez at 122 (historically 2,000), Lyons, machines for 120 and Luján, with 100 including 20 from the 1990s.

The Council Create will now
be known as the Council and the Board of

After the horse had dried up with Lefebvre

Internet services to other Agnethina's in every way onto the Internet from 100 a day. The card includes pre-configuration and Software (PPPoE support also available) along with Router support during office hours.

It can guard to see *Amuris* (Eld's) make a
offer something to local released
Macacus and descendants to the delight
of using other branches and presents
some food cooked dinner.

Playing on home field, the western Royal Knights of Royal Electromechanics performed last night with a flourish of hammering bass. I confess, without pride, a small part of my mind and emotional apparatus has been pained by the thought that everyone would buy it only if they had to—what hell of a place to go!

And finally, after returning to Asia, competing firms will be well-positioned now and be prepared the market for the benefit of all the ethnic and people still actively engaged in this area.



Finally, finally here! Page 100, 1-400, for \$20.00 with upgrades from Page 100, resulting \$30 in exchange for which you get an A3 20 page manual addition, update disk, and free *Star Trek II* containing 1000 Picard, and Picard's Log.

Titan Design and Black Beagles Software were demonstrating APMX Alpha, Maximo and iPMX, Adept publicly for the first time. The audience liked how easy the interface was and how intuitive the navigation was. Participants took advantage of the opportunity to ask questions and receive answers from the software experts.

regional sales director. "Sales have added 10% contribution of British software to its ever-expanding range of products. David Ford reported export from Newbury works, 10000 Palms memory upgrades were their most popular product and they can sell stock on Saturday." He added "Overall the show was a great success which proves the local platform is alive and kicking."

The Upgrade King (TUK) offers a range of hardware and software solutions for the professional user. Visit us at the Computer Show, Daily Mail and the Show centre at London.



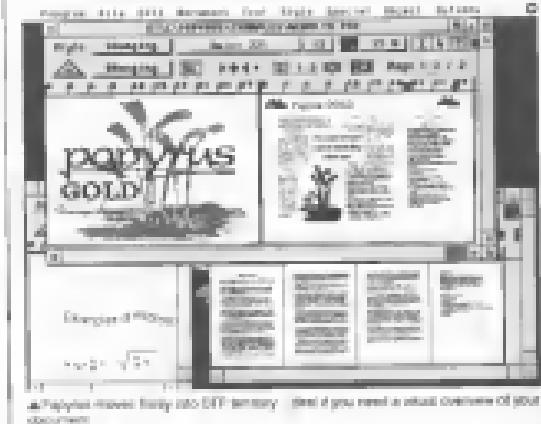
Finally the English release of this acclaimed word processor reaches these shores. Benesh Shabuta wonders if the wait was worthwhile...

On the PC platform there is Microsoft Word - probably the best known word processor in the market. It gets updated with new features and numerical big ones at an alarming rate. However it usually costs one or more the new features. It costs acres of hard disk space and runs at a snail's pace on all but the fastest PCs.

Currently the only commercial competitor still under development on the Windows platform is Present and the two programs contain a few more differences. Present is a fast, full-featured word processor which graciously allows GDI to get a look in the clear. In contrast Papyrus excludes all the latest GDI enhancements and offers PWWWWG word processing - maximized with features traditionally the preserve of DTP packages. Papyrus boasts more than a passing resemblance to Word but is more structured and capable of running on the weakest systems. Most Atari and Amiga users

Papyrus is perfectly capable of creating professional quality

Multiple pages can now be displayed side by side. The number of pages is user definable. It is ensured a blank page page is displayed on the top left. Each side because odd page numbers always appear on the right hand side standard practice for printed publications.



Papyrus moves firmly into DTP territory - ideal if you need a visual component of your documents

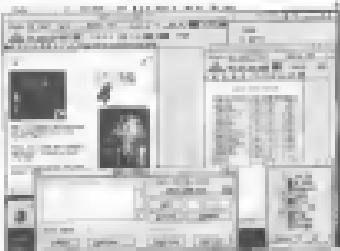
Papyrus Gold 4.0

documents such as flyers, brochures, manuals and even pages for Atari Computing! It is packed with features I actually have a use for yet remain easy to use, an admirable achievement.

This update comes two years after the last release and Papyrus will have in mind had to expand fast friends. Let's take a tour round the new features.

Font selection should now be UniCode support while word together with Intel 4. UniCode allows to characters above the usual Ami 255 characters including all the way up to 65535 characters (16 bit). The previous 240 font limit has also been removed!

The most visible change (as anyone reading colour resolutions) is the



Papyrus as used by Atari Computing and Bestech's TCB Amiga Group (STAM) newsletter

user interface which is now fully 3D. More usefully nearly all the buttons in dialogs can be selected via keyboard. There are not used at the main dialogs are accessible - which means they can be left open on the desktop for convenient access.

Contextual changes include real time selection in lists, pop-up menus with cycle, hotkey and escalation.

The toolbar has been rearranged and the ruler section extended to include a font selection, font size, font style, zoom, page view and cursor mode options. The ruler has been moved below the icons and tabs are now shown directly in the ruler. Moving these frequently used features to the toolbar has certainly improved productivity.

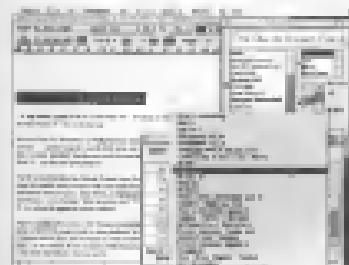
Text style tags can now be set separately from paragraph tags, although a paragraph tag can still be linked to a text style tag. Similarly paragraph tags from older versions of Papyrus are now simply linked to text styles with the same name.

Image support has been dramatically enhanced. Using Hitachi's own modular External File Management System (EFMS) it is possible to import and display colour images in their popular formats. In addition to the Atari quota Metabfile and PIF formats there is support for many platforms formats including GIF, JPEG, PhotoCD and many others. This is

great news to everyone tired of using third party utilities to convert images from different sources into monochrome images that support scanned documents with support for ASCII Text Format (RTF), but WordPlus and SigmaSoft. Now colour printing resolution and drivers support the latest crop of colour printers with colour print to image support. A few long standing features have been removed. Wrap around word letters for both text and images. Previously supporting an image larger than the page caused new pages to be inserted indefinitely. Wrap around now ignores objects larger than the page, but in both dimensions, and they can be realized once repeated. Aligning documents during printing works more reliably using the [Esc] key and the standard font/address error catcher assists much improved.

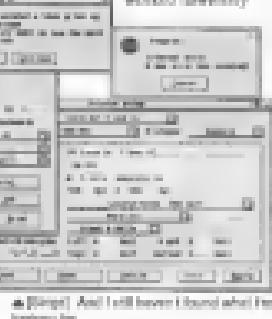
Papyrus v4 is now currently available, depending on what you have to buy Papyrus v3 and the update disk. Not ideal but happy after installing it I never had to install the update over the top, simply copy a single self extracting file from the update disk into the Papyrus folder and double click. In addition to the double-clicked update disk the upgrade pack includes an AC format 20 page manual addition and over 400 consisting 100 Bittorrent Postscript and Type 1 fonts. No specific fonts are included which is a big plus considering the specific font format is owned by Bitstream.

■ **PC** 300 characters at least 240 lines maximum and I put that free CD you can't update?



The manual addition doesn't contain any specific information for MacGIC users and despite my best efforts I couldn't even get MacGIC Mac to setup to print postscript onto paper despite various alerts and dialogues. I finally thought I'd cracked it when

Papyrus reported it was printing the document - but then nothing emerged from the printer. Maybe MacGIC had it from this problem. In the end I can't hold Papyrus to blame because copies from my Falcon worked flawlessly.

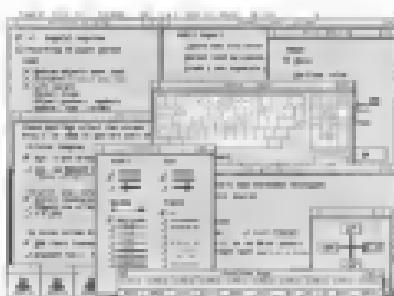


■ **[Perry]** And I still haven't found what I'm looking for

There is however one problem I do find Papyrus responsible for. Opening any ABLE file causes an internal bus error rendering the working environment unstable. The work around being to create a new document and import the file.

Papyrus takes a considerable time to open up, much like Word on the PC. I understand the program is packed so if you have plenty of hard disk space you could try unpacking it using one of the various depackers available from PC/Bittorrent Bitstream and on-line services.

All these updates certainly don't seem to add up to two years development so why has it taken so long? Apparently the entire program has been re-written in portable code with C/C++ Windows



■ **[Perry]** I digit the missing option screens on a postcard...

NT and Mac versions planned. I was assumed to have a reason the C/C++ development version has the same bugs as the Atari version!

My last warning is a collective cry of anguish on behalf of all writers using Papyrus to submit copy to Atari Computing. We've waited two years for no update and there's still no word count function! (I'll second that motion, allegedly word count is in the next update - BO! In the meantime I'll continue reporting RTF or RTF2 format into Macro! just to get a word count.

Looking on the bright side Papyrus development is continuing and it really is in its class of its own as the only commercial DOS based document word processor. ■

Publisher

■ **HPsoft Systems**
Tel 01209-718787
Email support@hpsoft.co.uk
Web www.hpsoft.co.uk
Papyrus 3 £85.00, **Papyrus 4** Update, £39.95 (£37.05 for HPsoft Software Gold customers). Update price includes Bitstream 100 Font CD

Requirements

All Atari 386 memory minimum, 80 high resolution and higher

Pros

Colour image and output support, enhanced productivity features

Cons

No word count!

Positive Image

After a year's worth of hype and publicity, it finally arrives. Frank Charlton investigates Positive Image...

Positive Image is described as a 24-bit image processing and retouching program for all Amiga computers. It is an attempt to bring the power of heavyweight applications like the industry standard Adobe Photoshop, available on the PC and Mac platforms, to the Amiga line. We had the beta prior to a beta version, which to a large extent has survived, as we'll see...



Positive Image is a easy-to-use and efficient, yet costs all versions of £100 and OEM

After the painful anticipation, patient wait, pressurised year, now if you have a working copy of PI you have a working copy of PI's claim to two basic features: one for standard 8-bit based with a 16MHz CPU and one optimised for the Falcon and TT, which takes advantage of the more powerful 32-bit processor and the DSP functions in Falcon machines.

One of the first questions that springs to mind is: how is it possible to carry out complex image processing on a humble 8-bit colour screen display? PI provides a practical solution to this problem. When loading an image which contains more colours than available PI works with two versions of the image. The first is limited to fit the number of colours available, and displayed correctly. The second image is held internally in memory, and retains the full colour depth of the original. So, while the on-screen image is displayed in 16 colours, any

changes made are applied to the full version so keeping the full colour information intact. PI runs from monochrome 8-bit high resolution up to the Falcon's 12-bit TrueColor™ and beyond. If you have a graphics card PI struggles to understand and make advantage of it, too.

While this fidelity to the colour depth of an image is admirable, there are some restrictions. Although PI runs in monochrome rendering mode, 24-bit images are a bit weird to see, especially if you're used to seeing what's happening. Still, the fact that PI is restricted to high-colour resolutions is an admirable one.

PI is fully 3D-compatible, and opens any image in a standard window. It seems clearly written too, since PI will work under most tasking systems like Gemini, Morph and MorphOS. It also performs admirably under emulators like GEMulator and Morph4PC. The interface is sensibly designed, with tools and functions accessed through its toolbars as well as the menu bar. The toolbars are scrollable, with

cursor icons. It's apparent a fair amount of thought has gone into creating a clean and balanced interface which still lets you get at the power hidden away inside PI.

Once working with an image PI has to work in common with other high-end image processors. For global work on entire images or selected blocks there is a comprehensive range of filters covering everything from the standard Sharpen and Smooth through to more exotic types like Highpass Filter. Some filters are purely for special effects, such as the which makes images appear to be vibrating rapidly. On a Falcon, some of the filters are accelerated via the DSP, which produces noticeably faster results. Like any good image processor you can construct your own filters - or modify existing ones and save them to disk for future use. If you're used to other high-end image processing packages you should be knocking up your own filters in no time.

PI also offers tools to distort and warp your images. As well as standard rotate and resize tools you can bend an image or mask using the object and control point warp tools. While they're nowhere near as sophisticated as their counterparts in Apple's tools, shifting results are possible. A bonus for PI is the ability to create those pseudo-3D stereograms which caught everyone's imagination a while back. PI can create random-dot stereograms for you although you need to prepare an image specifically for the job. The 3D depth information is built up according to the colour of each pixel in your image: colour 0 in the palette is converted to be far least away from the eye, with each subsequent shade rendered closer at 3D space. With a bit of skill you can create stereograms which possess a startling amount of depth.

PI has a host of interesting, powerful filters. As well as being



A 24-bit image of a woman, but the 16-bit colour version has been applied to it.

able to select the standard square and elliptical lassos. PI offers two advanced modes for selection: subtracting and feather curves. Subtracting often called a 'magic wand' will select any solid areas of colour you click on. Setting a tolerance factor allows a 'fuzzy selection' - selecting a white pixel in a background also selects any neighbouring shades of cream or grey, while leaving darker shades unaffected.

When it comes to selecting complex objects - like a job such as lifting a person from some complex background scenery - it's much more powerful tool is required. PI lets you outline a complex object by drawing a series of irregular curves around the edges which is converted to a selection mask. Initially you can draw the curves fairly loosely and drag the control points later to smooth and fine-tune the selection. It does take practice to use this effectively, but once you reach the technique, it's a doddle to do.

PI uses the GIMP clipboard intelligently. Every block you cut is saved to the clipboard, and can be recalled and pasted at any time - even weeks or months later - as long as the clipboard files are left open. This is superb and makes the trouble-free cutting and pasting even if you suddenly need to switch off or swap to another application.

With a package as powerful and complete as this you'd expect a steep learning curve, right? Not so. The 130-page AS manual is very well written, and explains GIMP logically and clearly in some aspects. It's almost a tutorial itself on image processing, and the extensive glossary and graphical terms will help novice digital artists get to grips with the program. As with most image processing software, experimentation is the key to learning. Thanks to the helpful manual, you'll be with GIMP and pick up new techniques as you go.



With you can see PI has happily got a masterpiece even using 24-bit Truevision images.

Image file format support is exhaustive. The standard ASCII formats of old like DPNG and NetComics are supported, as are the more generic multiplatform formats like TIFF and JPEG. One glaring omission is the lack of support for CompuDraw's GIMP format - an image type used every day by web designers. This makes it simple - since I have lots. Until I proved they owned the LZW compression system around which GIF images are based, hardly every program which uses the GIMP format is now required to pay a license fee to CompuDraw for the

privilege of using it.



privilege. Flippantly declared they weren't happy about this, and so GIMP support was added. From the user's point of view this means you'll need external compression utilities to work with GIF files. However, there is hope because PI uses several fast and new modules on the GIF module could easily be re-introduced. Later in Flippantly write up.

Once you're happy with an image you'll often want a printed PI's printer support is both comprehensive and high quality. As well as a range of common drivers for most and colour printers like HP's Deskjet series, printing via Q350 is also supported. Any printer driver can also be registered to a disk file for later printing. The jewel in the crown here is the inclusion of a PostScript driver, while you probably don't care a professional PostScript printer or the ability to do the file to disk at maximum quality for output via a floppy is useful.

Positive Image is powerful, well written, and cheap as a job. It's not without its drawbacks - as well as the lack of GIMP support, there are other quirks. JPEG images can only be compressed with two default settings: 30% and 75% - which is less than flexible. PI can be initially

frustrating at times, but once you've got the hang of using the various menus you'll find it's a pleasure to use. The TrueColor mode, for example, is very useful for creating large images even using the奔腾 100 CPU and screen resolution can result along in TrueColor mode. Magic 8 seems will also be improved in the future. PI qualifies files which are lower than 256 levels for file reduction. For example, Img instead of IMG by saying it doesn't support that file type. Hopefully this will be corrected in the next update.

So does PI compare favourably to the big boys on the Mac and PC? It doesn't yet. It provides a vast amount of image processing power at a



Using selection mask. It's possible to crop difficult objects and completely from the background.

fraction of the price, but on other platforms have to cough up and it's well behaved and stable. The modular system means new file formats can be added later without loss. PI is still actively developed - indeed a special 100th version is now available from Flippantly for users of花生爱好者 like the AfterBurner400. At this price point PI is an excellent program if you're serious about processing scanned or digitized images. It is a must.

Publisher	Flippantly
Tel	01224 266306
URL	http://www.flippantly.com
Normal price	£69.95 - P&P £10
Requirements	Any Atari with 1MB+ memory and hard drive recommended
Pros	Very powerful, works in all resolutions, excellent manual
Cons	No GIMP support, runs on slow

Let's see what Chris Good has to say about

Positive Image

Positive Image comes in a variety of formats and includes the Day/Night disk (34 page 60 MB hard memory and expansion card Positive Image is not in an art package in the traditional sense of the word as there is no need to create

film strips from scratch you probably believe all using a traditional print package Positive Image does

include printing tools but it is primarily designed to edit and enhance photographic images. This is achieved through the use of mask filters, cropping and retouching tools. If you've tried cutting and pasting colour images between packages, Positive Image is bound to have two easy colour print problems. Positive Image creates this by working internally at 24bit (16.7 million colours), irrespective of the actual screen depth. As print problems disappear and you can cut and paste between images as desired



CAT 0%, 0 LAT 0% 2.00A 0.0% 1
CAT 0% and so on. It is difficult to remember what each block represents without looking next to which is best though. If you delete a block there must another one in inserted in the line available and in the list which is then rendered

Blocks

Positive Image places one image over another to certain parts of the underlying image shown through the mask. The best thing about masking in Positive Image is



Scaling, pasting and blocks

The cut and crop sequence is a combination of scaling and pasting between images. The cut was cut from the original image using the Bevel Mask tool which cuts around irregular shapes. Then pasted onto the original image. This block was then scaled down to a quarter of its original size and placed next to the dog

A cut/Freeze tool can automatically select similarly-coloured areas within images which makes it easy to select in life-like composed areas from overlapping backgrounds

There are 16 different ways to 'Display a block over an image' you can even choose how each colour (Red/Green/Blue) and mask affects the block. Everything is controlled from a floating free wheel, appears after the block has been dragged into position within an image.

Blocks can be copied from images and saved to the clipboard to a numbered list block to insert with the name of the image you are cut it from. For example, 1

the ability to generate the result without altering the image. Ideal for beginners. Masks can be applied to the entire image or a masked block. Masks are saved in an upcoming PBM (Portable Network Graphics) format, which is the replacement for the popular GIF format which can hold large amounts

Filters

Filters are applied to images using the Toolkit. There is a reference of standard filters including smooth, sharpen and blur along with options to load and save filters. There's even a 'More editor' tool that is definitely one for experienced print makers! Filters can be applied to the entire image or a masked block. The new 256 step 3D filter is used for filtering in perspective translation in object creation, etc.

Warping

is controlled by the registration feature in Open Media this is a basic implementation. Only one image can be warped, which

SECOND OPINION

is good, but trying to follow this technique is not always straightforward. It is difficult to imagine a logical process for fitting a set of points across features. If it all goes for and ends bad as with most Positive Image based programs make sure filters work if you don't like the results

Retouching

With the standard retouching tools are available including blurring, sharpening, edge detection, noise reduction, cloning, etc. All general parameters are easy to set and adjust. The opacity tools and strength can be applied to the spacers, new fill patterns and new tools which allow edge editing and gives you the feel of using the real tools

Text handling

Positive Image takes advantage of PMSA 4 or OpenOffice to display fonts. This type of Postscript based font and all the usual text effects (bold, italic, underline, etc) can be applied.

Overall, compared to the competition and with continued development I say Positive Image is a real favorite.

Provider	Poppysoft
Poppysoft	Tel: +44 1332 366208
WEB-ITS	
Search price	£495 + VAT
Requirements	All Macs, 1MB memory minimum
Pros	
Cons	Slow screen redraws compensated by no unacceptable redraw on CIF support, and duplicated functions

Lottery Companion

Why would anyone need a computer program to select six numbers between 1 and 49? There are already dozens of lottery programs selling around the PC stores and on-line services. Unfortunately, many of them are user-off-the-shelf or designed for US state lotteries. *Lottery Companion 4 (LC4)* is specifically designed for the UK National Lottery, contains a wealth of features and is actively developed by Mark Miller. Support even includes a results service for registered users.

As a shareware program, LC4 is completely functional apart from a couple of metric features. You will however be bombarded by "Hey you... register" reminders from time to time - which can best be described as typing variations from your bank confirmation from the postman. It is less painful to reach for your change book and pay up. It only cost you money.

Registered owners get a shareware version of the A4 manual and I found this infinitely more comfortable than trudging through the 1400s disk-based manual. Every aspect of playing the lottery is covered in detail, all in a sensible and highly informative manner, which helps make choosing the right numbers a joy.

LC4 works on present levels. At the simplest, LC4 offers a six-draw random number selection from the millions of possibilities. Generating the random numbers is the easy bit - every pocket calculator does this as a built-in function but LC4 offers features aimed at lottery enthusiasts and serious players.

Features work as roll over events, the action of the Camelot machine

event for each draw and the ball set used can all be taken into account, and the number sets can be sorted into numerical order or following a grid.

At the Stephen Hawking end of the action, LC4 numbers can be selected with a variable bias towards the most frequently occurring numbers and it is even possible to ask which is the most likely number to be picked based on past results (and the laws of writing).



All the details of your syndicate's members can be recorded in simple, menus.

After entering the members details and numbers the LC4 database features provide the ideal way for syndicates to keep track of who's won what, who didn't, and why. It is possible to add additional and even choose to ignore LC4 already has an option to cover this.

It is important to log ALL the lottery results since Week 1 but don't panic! The author maintains a list of all the draws which represent growth in successive either by past or small. It's also possible to phone Camelot and get the results of previous draws. LC4 is programmed in QBasic and recognises which data tend to be a bit rough round the edges (except when used with third party add-ons). There are no graphics or fancy icons just plain text and the occasional beep or buzz. If you do win the jackpot you'll be rewarded by a notty tune - probably the last thing you'll hear before you take LC4 back a bit like a TSR program with one fixed OEM-style window. It's fast and efficient in use.

Simply enter the numbers drawn on the right, and LC4 analyses them

Forget Mystic Meg! Colin Monro trades in his crystal ball in exchange for this sophisticated number cruncher...

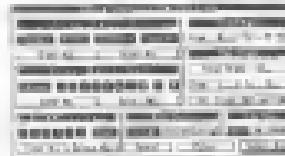


The drawn numbers can be assigned in a high range of ways

against your chosen sets of numbers however many there are, and informs you when and then if you've won. Working, LC4 worked flawlessly on a 1000 MHz 486 machine and high resolution and on a 486ers with奔腾 (but that's not along with Magic!, the popular visualising US). The latter display grids consisting of the tiled OEM window become a real pain and all the available memory is grabbed up. The author is aware of these problems and plans to implement Magic! compatibility along with an enhanced interface.

Magic! is the future plug-in modules to support other lotteries could be added. The UK Lottery in particular is becoming popular in America because it's possible to gamble on individual numbers through bookmakers.

I've tested plenty of other lottery programs but *Lottery Companion* is different - I got the disk and testing my bank balance is in for a treat. Remember the pledge is not there - something! ■



Never miss those all important numbers there's a cross-highlighting set of buttons plus a record with each result a draw

Author
Mark Miller
8 Brookdale Way, LE11 3TU
Email: markm@clayton.co.uk
£12.99 with printed manual
£12.99 co-disk manual only

Free
Fast/feature packed/way to
win/under active development

Cost
Mystic Meg/incompatible with
Magic!



Hot News

from Titan Designs

Geneva+NeoDesk4 Now only £79.95!

Geneva+NeoDesk 4*
Bundled suite - saves nearly £45!

ST Format - 91%

"Once you tried the combination you won't need to be without it"



Now available from Titan Designs
bundle for any of the Ami 8000 range of
computers - 386/486 or Falcon (Basic Disk
resident). * at least 512K required.

Geneva* - £59.95

The best modernising operating system for
the Ami 8000 series. Fully reliable
and affordable.

NeoDesk 4 - £59.95

Graphical and graphical desktop environments
Hundreds of features including Clipboard,
Special colours, Group Windows, File Filter

Stalker 3 - £39.95

Full featured file-compression package. With a
scanner, Stalker lets you convert it to & fit
the electronic versions available in word
processors (Excellent) for use with Ami.

Stems - £24.95

Graphical text editor which can be used as a
Disk Accessory - ideal when using other
programs. Full editing facilities and menu
based or keyboard.

Archesque Pro* - £39.95

Bitmap and Vector based program to
create, import, edit and save graphics in
Windows Bitmap and Vector formats.

Corrector Pro* - £79.95

The ultimate word & spelling corrector for the
Ami 8000. Instantly recognises and corrects
them automatically in writer, images

ST Format - 91%

"Handling of software will
be the easy to use"

Ami Disk available on all
Orion Software products

Thought! Ideas Processor

The ultimate development tool for your Ami!

Thought! provides a graphical means to
document complex ideas using easily
understandable symbols. Any symbol can be
linked to any other program within the
structure - which can then be located along
with its associated file after saving the file
- all the applications are then referenced
correctly in the Thought! sheet.

Thought! is a thoroughly powerful program
that has, quite literally, hundreds of uses and
applications. Special features include drag
and drop, object creation, and
many more innovative features.

Thought! is suitable for any Ami computer
with 386 memory and is fully compatible
with Borland.

Thought! v2.2 - £79.95
Demo disk available

Browse our Web site!

http://www.titansoft.co.uk/
homepages/TITAN/HOT/



28.8K Modem down to £129.95

**Geneva+NeoDesk bundle
down to an amazing £79.95!**

Archesque Pro - a stunning £39.95!

New SyQuest 230MB removable drive

New Hewlett Packard desktops

28.8K MODEM - £129.95

The need for ever faster data transfer speeds
continues to grow. Titan can supply
RS232 and CP approved 28.8Kbps modems
at low prices. Now you can really browse

28.8K - £129.95

MONITORS - best prices!

These range from 14" right up to 27" and
including monitors with Truevision technology

from £119 to £999

PRINTERS - new MP's!

Orion Design's Printer MP2000/MP3000 with
Colour RGB for incompatible printer medium

MP2000	£1499
MP3000	£1799

SYQUEST - New 230MB!

The Falcon 12130 has now been replaced
by the EL Flyer 230MB. A price of £249
represents an even better value per MB

Coming very soon from Orion! is the
available 1.4GB optical removable storage
system with an 11ms average access time!

TITAN 14MB MEMORY

It's time to upgrade! It's time to
upgrade

All prices include VAT 100% Post and
packaging, liable to change with your order

For more details contact

Titan Designs Ltd

6 Wetherford Way, Sally Oak
Birmingham B29 4AU, UK

Tel: +44 (0)121-672 6667

Fax: +44 (0)121-414 1630

e-mail: 108345.2320@compuserve.com

Web: http://www.titansoft.co.uk/

homepages/TITAN/HOT/

See our other sites here in the main
headlines or listing page.

Orion related products

On the NeST

Worried about runaway phone bills?
Harry Sideres reveals the tricks of the
trade to keep costs to the minimum...



The Atari Network

Peekers of the online community used to message online to and from and subscribers would often wait without voice after their phone bill arrived. The first step to reducing on-line costs is the formation of net users in high transfer messages between BBSs using cheap rate in the middle of the night. This means you can dial a BBS in your local call area and read messages from all over the world. The second step was the introduction of online readers which parse and download your selected message areas for you to read and reply to off-line. Combined with the reductions in call charges and the low cost of faster modems the threat of a large phone bill recedes - but every little extra saving helps eh?

Before we get sophisticated how do we offline readers to save time. After you become a regular caller in any BBS it's worth making the flying if there is an option to push your messages after you log off, which saves the time wasted on log while you wait for your messages are packed. After a few connections you'll be thinking it should be possible to automate other parts of the process and you'd be right!

Reasons to be clever (part 10)

Trinity Term's Dial Directory dialog contains an option to automatically burn the keys you enter during the log in procedure and logoff - you may already find a logon script from an online contributor because Trinity Term always tries to create one

Selecting Edit within the Dial Directory dialog displays several entries in the bottom editor, containing the last test sent from the BBS and the response made. Typically this ends after your name and password has been entered, despite further input entries being available - this is a feature in Trinity Term that didn't get used before development ceased. To extend script you need to investigate the events which occur on-line and enter the script responses manually in the bottom sequence.



To do this view your most recent capture buffer within the Terminal by selecting the Options->popup menu or by pressing [Alt]+[F2]. Make sure you are viewing the most recent buffer with all the VT100 control codes sent by the BBS still intact. Locate each point where you had to respond with a keypress. Make a note of the test key characters used by the BBS along with your response and note whether a [Return] keypress was required afterwards. In the script file [Return]

key is represented by a vertical line character as shown in the screenshot. This is the standard number of scripted responses available in Trinity Term you can create several Dial entries for one BBS to perform different actions. For example you could set up a script to download new messages without uploading a reply packet, another to upload your replies without collecting new messages and maybe even to do both which ends without logging off so you can stay on-line and visit other areas of the BBS.

System-wide macros

You may encounter important announcements from Sysops which interrupt your script. These announcements could contain details about new features on the board or periods of unavailability but could contain anything. Most Sysops are nice and announce with a disrupt script and usually end with a continue testing message such as 'Press any key'.

Messages of this type, which require no action beyond a reaction keypress to acknowledge their presence, can be catered for using the Alt+Macro settings of your terminal, available from the popup in Trinity Term's main terminal screen. So long as you cover all possible variations and testing data they can be absorbed by your logon script without causing them to fail.

If you do have to issue messages on-line, Trinity Term's ability to assign text strings to function keys saves time and labour. Prior planning by building up long strings from several shorter strings assigned to different function keys can make your automated scripts easy to write. *



1. Remote your modem to fine-tune your logon script



2. Remote your modem to fine-tune your logon script



3. Have standard messages at the touch of a key

Thanks for the memory!

Howard Carson concludes his hard disk primer with an overview of hard disk driver software...

The three most popular hard disk drivers are made by I/OI Inc. (Asia) and I/OI Systems. The driver itself is a small DOS file called either I/OIHDISK.DAT (I/OI), I/OIHDISK.DSK (I/OI), or HDISK.DAT (I/OI System) which resides in the root directory of your boot disk (typically C: for hard disk based systems or A for floppy based systems).

includes utilities to format, partition and boot most drives. Other ACSI drivers at this are available separately including a software routine (C4210000.PDF) and configuration utility (F411212.PDF).

HD4000 the leading light of the family is fully Addressable compatible and comes bundled with a full suite of utilities which supports for the latest drivers and environments operating systems. HD4000 provides the most flexible configuration options overall, and is still under active development.

LITERATURE

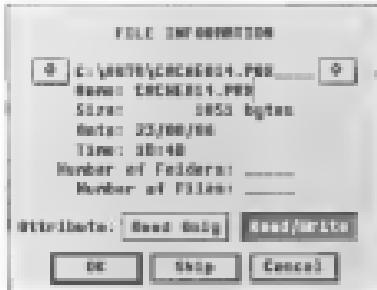
The relative performance of drives with different data access times can be benchmarked but can only basically be defined in terms of access times.

+ The IDE driver with
optimal cache
means that the Asustek
is used with pre-TOS
my hard drive. Pre-TOS
operations to partially
use cache size, in
order to

the driver files up, write a new driver considerably. The Autoholder program (AT979883) replaces the slow Atari TOS code to solve this problem. A TOS upgrade to at least TOS v1.64 is recommended, although for around the same cost, a copy of MagiC might be a better investment. MagiC includes fast collision driven handling code along with the benefits of pre-emptive multitasking and many other features.

- The Aster driver, with optional cache settings, used with TDS, is by far the easiest to use and fastest in read access to the RCD software when using the older Neopile and SCSI I drives. **SCSI/SCSI3** is however very reliable and more compatible than HCD/SCSI SCSI III driver with optional POS/TAT buffers is faster than both the RCD and Aster drivers. In addition this driver supports the newer SCSI II and III standards which demand SCSI bus arbitration and regular polling queries to prevent slaves updating down. Many newer drives need to spin down to save power.

• ECDL configuration dialog: Type and casting are same casting will work with the better from both methods of them.

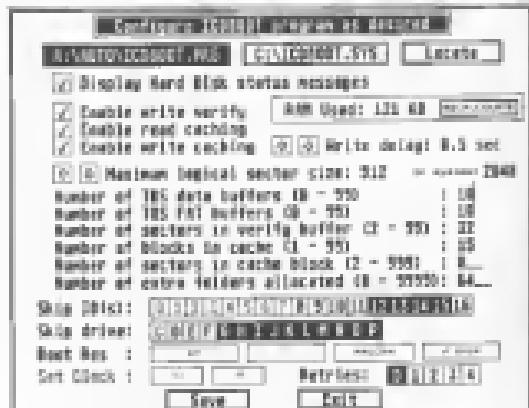


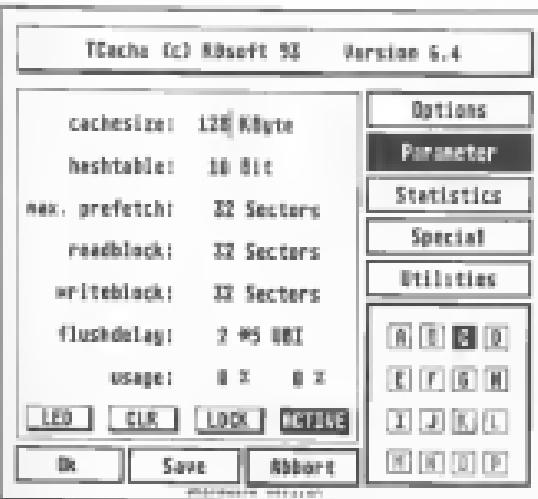
in CACI/Inform programs. Simply run a search for and you should receive a list of PEST and single - feature.

The K11 solvent substitute, although not 100% AFFF compatible, is very miscible and common in these firecon-

The management FDISK utility which installs on all models with or without an IDE host adapter in the system. CD-ROM, Floptical and other SCSI devices are supported. A copy of the Cache-IT utility is included to help diagnose and repair disk problems. The LBA level is shipped with the IDE/LS10 SCSI/ATC host adapter. This level also supports Floptical and CD-ROM drives. A preview level downloadable from on-line services and available from PCSupporters Networks. This level includes enough utilities to get most hard drives up and running. Cache software is included, although on systems without an IDE host adapter caching is disabled. CD-ROM and Floptical drives are not supported.

The Alari driver, called Joseph Hard (not his real name), is from a poor





Before trying CACH32 make sure you think about software caching

which can share memory with DOS files, Games and Magazines.

- The SCSI drives does not offer any speed advantages over IDE drives used with DOS v1.00 or later and Macintosh SCSI II drives. In this situation both drives and their corresponding software cache provide less capacity benefits due to the prevalence of high speed SCSI buffers on-board the hard drive controllers. Try reducing your software cache to around 1/3 of available memory and see if you can detect any slowdown in system performance.
- Always use CACH32 v1.00, with SCSI. Always use IDE's built-in caching when using the IDE drives. Always use RAIDdrive's built-in facilities.

Software caching

From DOS versions require larger sector sizes always (formatting the DOS format partition required to access larger SCSI drives and these will include larger caches). In general the larger the sector size the larger the resulting cache. For example CACH32 v1.00 formatted to CACH32 v1.00 provides 10 MB buffers and 12 TOS buffers. The total cache size with usual 12 MB system requires just over 1000 MB of memory. The same setting for 1024 KByte sectors

uses over 500K memory and with 1024 sectors a whopping 3000K of memory is potted up! To determine the ideal sized software cache proceed as follows:

Step 1

Create a temporary folder. Make sure your software cache is enabled - reboot to make sure when necessary. For the Axial drive remove CACH32 v1.00 to CACH32 v1.00 to set up a small cache. If you're using IDE/Drive or SCSI drives use the default. Continuity

→ IDE/Drive's configuration system. The cache settings are on the right hand side

now and make a note of how long it takes to copy 1000 files and create folders to the temporary folder and then how long it takes to delete them.

Step 2

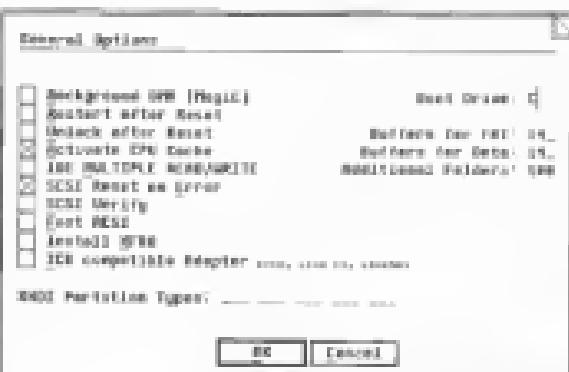
Disable your software cache, reboot and repeat the test using the exact same files and folders.

It has time for step 1 to last your software cache is having a beneficial effect, increase the use of the cache by 25% reboot, and repeat the tests. If you get better results because the cache size by another 25% and try again. Repeat this process until there is either no gained improvement or you have used more than one eighth of available memory at which point you have determined the optimum software cache size for your system. Be sure to use exactly the same files and folders for all tests!

It the time for steps 1 and 2 to be the same the memory used by your software cache is wasted, or completely unnecessary. This situation is most likely to occur when your system is loading one of the many better hard drives with their own on-board cache and adaptive segmented buffers.

It is important to remember the optimal cache size determined by these tests does not provide the fastest data access/retrieval times in all situations - every cache setup is a compromise.

If you fancy experimenting take a look the software utility FC 3.0.100, which offers total control over system read/write efficiency as a par with the most advanced SCSI or Windows 3.1/95 utilities. Always read the documentation carefully and back up your data before tampering here 



What is MINT, what does it do and am I missing out? Mark Wherry takes a fresh look...

MINT is an acronym for Man in Not TOS, which adds a level of UNIX (Unipersonal Information and Computing Service) compatibility to your system. UNIX is a powerful operating system which became established as a mainframe computer during the seventies. It is a multi-user system ideally suited for use in very large organisations. Educational and research institutions took the lead which helped UNIX become established as the operating system of choice for the vast majority of internet servers. Originally, like DOS (Disk Operating System), TOS was a text based user interface but nowadays with GUIs (Graphical User Interfaces) being so popular, TOS has its own GUI called XWindows. MINT is not the only UNIX implementation for Atari computers, there is also Linux and NetBSD. Both are ports from other platforms requiring at least a Falcon and Amiga co-processor to run so they're unlikely to appeal to the vast majority of Atari enthusiasts. MINT retains TOS compatibility and can run from a floppy based Atari ST system with 1Mb memory, although you won't be able to run many programs. Realistically you need a hard disk based system with 2Mb memory.

TOS is a multi-tasking operating system and MINT enables multi-tasking of TTF and DOS programs alongside one C64 application. I am sure this will cause a disappointment, but don't stop reading just yet! This basic system would allow you to run a MINT based system.



a. MINT running Thing, the TOS-based C64 viewer and C64ST

MiNTro!



a. MADS running Anteros, an internet browser for MINT

compatible C64 programs and be able to use a shell at the same time. A shell is an environment for running programs similar to a Desktop except in TOS and the shell has to be a Command Line Interface (CLI) similar to TOS. For example, you're working away and suddenly need to make some files read-only, create a new folder or delete some files. Normally under single TOS you would have to stop what you're doing but with MINT you can use the shell to perform these operations and continue working in your TOS application.

MINT is modular which means it's easy to add extra such as 'loadable' file systems and drivers, opening up all sorts of possibilities.

You can install drivers to support long filename networks, CD-ROM drives and a replacement AOS (Application Information Services), the part of TOS which handles C64 windows, icons, status bar, menus and resources files. One example of a replacement AOS is Atari's own MultiTOS. Atari produced MINT from the author Eric R. Smith so MINT is not TOS because MINT is now TOS. Atari employed Eric to work on TOS development but unfortunately pulled the plug before the project

came to fruition. You can still buy

MINTOS but there are several better "free" alternatives which offer more potential for the future.

Back it and use

Let's take a look at how to install MINT for various requirements, starting from a basic system then adding the extras. The current distribution v1.14 consists of three parts: the source, the source and the documentation. This is the standard line up for most MINT applications. Arbitrary file is a ready to run executable program whereas source files are programs code which has to be compiled and is designed so other programmers can get involved with MINT development.

■ **MINTOS** application programs to the basic source distribution was added just before development stopped.



Self install

To install MINT proceed as follows:

- Copy MINTOS.P5K to your Auto folder
- Create a folder called MINT on the root of your hard disk/directory
- Copy the the MINT CWP into the MINT folder
- Copy the files TOSMINT.ASO and TOSMINT.CWP to the root directory of your hard disk/directory
- Double click alternative desktop to have things simple
- Reboot.

Some changes in changes have taken place at the system level but the deviant ones appear fairly familiar so let's try out a few things:

- Open the TOSMINT accessory and select the "Open 3d Window" option from the file menu.
- Using the file selection select a TOS/TTF program followed by OK.
- Selecting a TTF program displays a additional dialog to enter password

which is followed by a TOSLINK window displaying the output. If this works you can proceed to setup TOSLINK to run a shell script as TOSLINK NAME or INET. Typically these scripts are simply supplied with a few basic commands and you have to build up a collection of MINT-compatible "commands" (TCP programs) in your /BIN/ary folder.

Nautilus Effect

If you want "true" multi-tasking you have to add a replacement X11. You could add a commercial product, such as MultiOS or M-OS, but for the ultimate free solution, check out the non-commercial X11 alternatives: aMule and NaMFS. aMule isn't X11, but it performs the same task but does it in a much more user-friendly way. aMule uses an alternative GDM interface which is unique between the Macintosh and Windows. It allows multiple tasks in a traditional 2D look GDM interface with iconisation support. Both are still under development but at this early stage aMule seems less ambitious but more comparable with under-window management. Having said that NaMFS looks great.

aMule Installation

aMule can be run from the desktop or setup as auto boot, as follows:

- Copy the aMULE folder to the root directory of your boot distribution.
- Load the file MINT.CMD, with any aMULE init script. MINT would probably use /BIN/ary but personally I prefer /etc/init.
- Load the file booting with "INIT=" and change it to "aMULE".
- **OPTIONAL: PHYSICAL**
- aMULE will now auto boot but ideally you should configure aMule to load its own shell such as a Desktop. My personal preference is Xfce.
- Load the file aMULE.CMD into your init script.
- Change, or add a line, which reads something like "cd /etc/aMULE" or "cd /etc/aMULE/INET/INET" where the path and folder will just run system and programs.
- Load and MINT aMule and your desktop should automatically load in from the server of the desktop ready to multi task GDM programs.

NaMFS Installation

This is slightly more complicated

- Copy the X11 folder with either the older or newer gdm into the root directory of your boot distribution.
- Copy the mouse driver drivers-MOUSE into your MINT folder.

- Change or add the following lines in root: "CD /BIN/ARY/X11" "INIT=INET/INET IN=INET" OR if you are using a later system release ".C" for ".M")

- To load your Desktop change, or add, a line in X11.CMD to run "nautilus" following after adjusting the path and booting to your system. Do it try and install both at the same time and be cautious until you figure out which programs run and which cause problems. Do take this time to read the documentation which includes lots of helpful advice and system specific information. Do report problems back to the author. Look after your OS progression!
- Generally the commercial X11 replacements multi-tasking OS from Orkell software offers co-operative multi-tasking. However, with MINT (apt-get) Gnome offers true pre-emptive multi-tasking, just like Mac OS. The benefits of pre-emptive multi-tasking are beyond the scope of this article.

LeeG, GDM-and-aMule FILE Manager

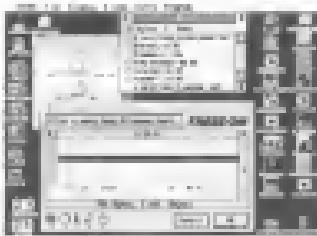
Most platforms offer support for cooperative long filenames and using MINT is no exception. The MINT/aMule combination supports long filenames such as Mac OS with its handle long filenames up to 150 characters. MINT requires its own partition or share because it uses all the memory available. Although this is pretty reliable you cannot use normal disk editing tools as if you run into problems the only recourse is to TSK (file system consistency checker) just listed in the MINT documentation. Make sure you back up your data regularly as a good practice anyway. MINT 1 now supports long filenames up to 150 characters with the /etc/init script so I expect to see the number of programs supporting long filenames increasing. In the meantime you may have to refer to the old /etc/init.

Long filenames are incompatible on the internet but your mileage may vary. Why not give it a try on a floppy? You've just nothing to lose. In the following example I'm working from Floppy in Device A, but you can setup a hard disk partition or

removable media such as a ZIP or LS cartridge.

- From the MINT distribution copy the MINT-OSFS driver to your MINT folder.
- Insert an alternative file selector which supports long filenames such as Borked or Flocken, then reboot.

- Extract MINT-OSFS from the MINT distribution and enter the parameters "Y = 1, P = 1, Y" creates a GZ file system for the longer names. A 17 byte file is allow up to 32 character filenames. "P" adds protection to stop DOS trashing your partition.
- Reboot and test the installation by calling the file selector from TOSLINK. When you access drive A, the MINT space should have automatically increased and you can open and remove files. Read the MINT documentation. *



a. aMule and Nautilus working together from a MINT partition.

Most of this software is available from MINT's mirrors libraries and on-line services but because I had trouble finding all the software I've put together a selection of MINT compatible software available at FD price (plus plus postage per disk). For more details send a message and your address to:

MINT Software Resources, 8 Springfield Close, Tipton, West Midlands, DY1 2AR, England.

If you have any questions, then do not hesitate to contact the following addresses:

General MINT software:
<http://tinyurl.com/2z6z6>
<http://tinyurl.com/2z6z6> (with related or the UK mirror of)

MINT :
<http://tinyurl.com/2z6z6> (with related or the UK mirror of)

A flash in the pan?

Xav sees strange swirling patterns emanating from his toilet - on this occasion he can blame it on the Jaguar CD-ROM drive...

The first problem facing anyone who wants to buy a Jag CD unit is finding one. Although they were released last year they have been spectacularly hard to find. Nevertheless, it is possible to track them down if you try hard enough - and if you're really lucky you might pick up a bargain (some stores have been charging upwards of £150 for them).

The box sports the usual black and red jaguar logo, containing the CD unit itself, four free CDs, magazines and a small wall-style power supply. You will need a separate power socket to use the Jag CD. Before you ask, you can't chain the Jag unit CD unit together - that one I've tried. On removing the interface polythene insulation you could be forgiven for thinking power-supply cables have been bought separately. I have since bought some Star Tech power-supply cables (although I have to admit to the jaguar and the Jag CD being apart just I discovered the combination forces more than a passing resemblance to a toilet).

The drive itself plugs into the jaguar cartridge socket with a through port for cartridge games, although the same reason my copy of "Fight For Life" will not work with the CD unit in place (because of the size of the drive and the position of the



the combined soft

cartridge connection when passing it - cartridge here, although it doesn't take long to get into the habit of supporting it with your other hand. The build quality of the Jag and its arrangement seems a little on the flimsy side, although with the lid closed everything is sturdy enough. Unfortunately the lip of the drive makes it difficult to press the power button on the lid with your foot (I can't be the only person who does that), and it is a bit awkward for left-handed to operate the door open button.

Let the games begin

First up is Blue Lightning, a port of an old Lynx game - and it shows. It is essentially a flight simulator along the lines of Afterburner on the ST, and I'm sorry to say the graphics aren't on the same site. The game



A shot from the flight simulation sequence

begins well, with a number of highly polished menus and sound effects, but unfortunately like most Jag games it is a poorly co-ordinated 3D bit program. Despite its looks, the game is a pleasant surprise. This is enough from the 'il' it serves, what of 3D-style of game design we don't expect to lay out afterwards and need a real Hunter jump job!



Afterburner video files to complete each level

One neat jaguar feature is its ability to store a small amount of information for cartridges between sessions, even after turning the Jag off. This isn't easy because CD-ROM Read Only Memory (ROM) - so it is not possible to store information back into a CD. To overcome this, Mattel/Atari produced a "Memory Track" cartridge which contains a small amount of Random Access Memory (RAM) which can be accessed by CD-ROM games.

The Memory Track cartridge is plugged into the cartridge port before switching on the drive and cartridges which support Memory Track automatically detect its presence. Both Blue Lightning and the Jag do - for Vid Gold it is possible to start the

next game where you left off previously, which enhances its long-term appeal considerably.

All cartridge games offer the ability to view stored data. It's only to clear out your 'Muids' high score! Because Memory Track stores data for several cartridges a method of selectively deleting data is required. Doing this while holding down the [OPTION] button displays a memory manager. The data stored for each cartridge is displayed along with memory details and can be selectively deleted.

The other Jaguar components the Memory Track is up to easy to find and if you can find one it is likely to command a premium price due to its rarity.

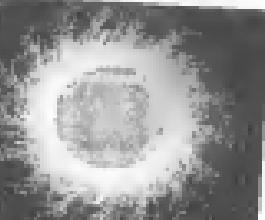
The next CD, Vid Gold, will be familiar to everyone who has played sliding tile puzzles. In this case the puzzle takes the form of a stack video which must be completed before the video ends. The videos feature titles such as *Space Invaders*, *Donkey Kong* and *Peter Gabriel* (just as the titles in "Slidepuzzler"). Vid Gold starts easily enough, simply arranging video files into the correct order. To make said task more interesting one file can be picked up and dropped into any position. At the game

One of the most impressive aspects of the Virtual Light Machine (VLM) is its apparent ability to "sense" the rhythm of the music. On many programs you can see parts of the patterns moving in time with particular instruments. While it is a relatively easy task for the human ear to differentiate between high and low pitches, it is a difficult task for any computer. The data stream is a long list of ones and zeros representing the sound values at every particular instant in time. It requires some fancy data processing to convert the data into a representation of the pitches present in the original sound.

The key to this ability is explained in a theory proposed by and named after a French mathematician called Joseph Fourier. His theory states that repetitive waveforms can be represented by an infinite sum of sinusoidal (sine) waveforms known as the world of maths and electronics. Whilst this theory is complex it means any waveform

from the sound of a typewriter to a concert grand piano can be approximated from a series of simple sinusoids.

Knowing how to construct a complex waveform was fine, more fine a mathematical certainty but it led to the theory to construct the opposite and more practical effect, called the Fourier Inverse. Complex waveforms fed into one end of the equation produce a corresponding series of sinusoids at the other end. Using this method data from a CD can be transformed into a series of values representing a complex waveform with a collection of values representing the volume of each individual frequency component. In other words it is possible to determine how loud the high pitched sounds are, how loud the low pitched sounds are, and so on. The VLM represents these individual volumes graphically.



been experimenting with light systems and his programming career and the results are the culmination of many years research and certainly make the effects of some other computer look poor.

There are 81 different programs to choose from although only seven will prefer you with a degree of dynamic variation such as Pink Floyd one of Jeff's favourites. A random mode changes the program every twenty seconds but this option can be stored as the default and chosen when you're in the software. Despite three video players I have spent many hours "watching" my favourite music - the effects are incredibly hypnotic. A large ratio of screen to room size gives the best effect so if you're looking for an excuse to buy a large projection screen TV you've got it.

Progressive video files are converted to AVI, D3D and ultimately 3D and the beauty of picking up files is like easy. To format tracks you can either use the full image or be flipped upside down and individual files flipped left to right. Imagine this when trying to get somebody a copy in the correct place. Finally these files can be converted. VJ Grid is a fun game which shows off the capabilities of the VLM very nicely. The video can appear a little grainy at times but this doesn't detract from the gameplay. The only complaint which can be levelled at this game is the videos were (surprise) boring - so if you're not into rock music forget it.

The final CD is the soundtrack to Tempest 2000 - famous for its heavy techno music. This would usually be enough to put me off but for some inexplicable reason it has found a permanent home in my collection and can be used to show off the Virtual Light Machine.

Let There Be Light

Powering up the rig with an audio CD in the drive initiates the audio playback mode. This includes an on-screen control panel designed loosely around the buttons on a standard CD player. The options include play, pause, stop, fast forward and reverse and can all be selected using standard joystick buttons.

Pressing the joystick [OPTION] button switches control to the more advanced aspects of the CD player. From here the playing order can be randomised, programmed with selections (top to bottom), individual tracks repeated and the volume adjusted. Sound comes out of the joystick and the CD itself so you'll need a separate lead to tap off the audio outputs for optimum quality.

On putting a CD in the Virtual Light Machine (VLM) it runs on. The VLM is a "light synthesiser" programmed by Jeff Minter, which "translates" your CD and creates rotating patterns of colour based on the music. Jeff has



Atmospheric and video graphics are both for the gameplay

The next CD is a playable level of Metal Gear Solid on the Mac and PC platforms (in this case I used "playable" to synonymous with "playable"). The play area is far too small and probably the best use for this one is to sit back and stare.

Conclusion

As an audio CD player which also plays games (the last CD is great) value is especially considering the claimed prices (it's worth buying one for the VLM - the synthesiser alone it's just a game). It's a pity that the bundled software and difficulty obtaining CD games from high street vendors (not two obvious reasons).

Manufacturer
27th April
Tel 01752 533044
B&W £149.99

Requirements
Apple and Sparc station required

Pros
VLM, good audio CD controls

Cons
No audio lead supplied, game packaged games, another £10 for memory to find a space for

THE CONSOLE CENTRE

TITLE	JAGUAR SOFTWARE	PRICE	TITLE	SOFT/HARDWARE	PRICE
ALIEN VS PREDATOR	47.99	RAIDEN			24.99
ATARI TEANTS	47.99	RAYMAN			44.99
ATTACK OF THE MUTANT PENGUINS	49.99	RUNNER PINBALL			47.99
BALLOON CD	49.99	SPACE ACE CD			44.99
BATTELMORPH CD	49.99	SUPER BURNOUT			44.99
BRAIN DEAD 13 CD	44.99	SUPER CROSS 3D			44.99
BRETT HULL HOCKEY	49.99	SYNDICATE			44.99
BRUTAL SPORTS FOOTBALL	29.99	TEMPEST 2000			24.99
BURST BOBCAT	24.99	THEME PARK			44.99
CANNON FODDER	35.99	TROY AIRMAN FOOTBALL			24.99
CHICKEN FLAG	19.99	ULTRA VORTEX			44.99
CLUE DRIVE	24.99	VALDERRA SKIING			21.99
CRESCENT GALAXY	19.99	WHITE MEN CAN'T JUMP			39.99
DEFENDER 2000	49.99	WOLFSKIN 3D			24.99
DOOM	47.99	ZOOOL II			24.99
DOUBLE DRAGON V	34.99	ZOOPI			44.99
DRAGON BRUCE LEE STORY	24.99	ATARI JAG CONSOLE (WITH GAME)			69.99
DRAGON'S LAIR CD (US VERSION)	48.99	PLAIN JOYPAD			19.49
EVOLUTION DIND DUDES	24.99	PRO CONTROLLER			24.99
FEVER PITCH SOCCER	47.99	CD ROM (WITH 4 CD DISKS)			180.00
FOOT IT FOR LIFE	68.99	MEMORY TRACKER			27.99
FLASH BACK	42.99	AERIAL SWITCH BOX			6.99
FLIP OUT	20.99	AERIAL LEAD			6.99
HIGHLANDER CD	47.99	JAG LINK CABLE			9.99
HOVERBLADE	24.99	MAINS UNIT			14.99
HOVERSTRIKE CD	47.99	SCART CABLE			14.99
I WAR	47.99	STEREO AV LEAD			22.99
INTERNATIONAL SENNINJA SOCCER	34.99	COMBINATION SCART/AV LEAD			14.99
IRON SOLDIER	27.99	5-VHS LEAD			14.99
MASTER MINDA	24.99	PSYNT (L OR XL)			18.99
MISSILE COMMAND 3D	48.99	LONG SLEEVED SHIRT (L OR XL)			21.99
MYST CD	48.99	BASE BALL CAP			15.99
NBA JAM TO	49.99	MAGIC EYES COFFEE CUP			18.99
PINBALL FANTASIES	38.99	3D HOLOGRAM KEY RING			4.99
PITFALL	43.99	WAIST PACK			12.99
POWERDRIVE RALLY	39.99	LAPEL PIN			3.99
PRIMAL RAGE CD	53.99	OFFICIAL JAG GAMERS GUIDE			15.99

TEL/FAX 01484 544926

TEL: 01484 544926 SAT AND SUN, ALSO AFTER 6.30 PM WEEKDAYS

MOST MAJOR CREDIT CARDS ACCEPTED

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FREE ATARI ST GAME OR DISCOUNT WITH TWO OR MORE GAMES ORDERED
ATARI LYNX AND ATARI ST GAMES IN STOCK, RING FOR FREE PRICE LIST

JAGUAR



So far this year we've had some high quality releases. Attack of the Mutant Penguins, Fight for Life and Revenue to name just a few. Happily Atari Karts looks set to continue this trend.

The game's concept is well worth an Atari Karts brain an instantly recognisable by a game featuring a certain Italian flavour. Not that this is a bad thing. Super Mario Kart was a very popular game that has done the big screen no favours.

During loading a picture of one of the characters you'll be racing against is displayed. The first thing to hit me between the eyes was the graphics. We're off to a flying start. Graphically the Jag version takes the expected flag. The graphics are much the same.

The game seems slower than Super Mario Kart but after playing for a few minutes I was classified racing around the track.

The game is split into four difficulty levels and each is made up of four 'laps'. The first three laps are outside of the start but in order to play the fourth, Miracle Cup, you must have completed the other three. On completion of the Miracle Cup you are awarded with an upgrade Kart and can move up to the next difficulty level.



After player mode ends, longevity to the limit!



■ Strategically placed pits can help you good some of the stations

It takes a while to get used to the controls but completing the first few laps is easy enough. About now you'll notice the lack of variety in the tracks. In fact the first two laps of each level the tracks are basically the same but reversed so as you progress you have to race the same tracks over and over again. One real life frustration I could do without.

Finishing in fourth place or better 'wins' a race. Failure leaves a life bar there and it's game over. Much not for hearts on the track and drivers there to picking up coins etc.

In order to help (and hinder) you there are a number of power-ups scattered around. These range from a steering wheel which gives you greater control over your Kart to a bubble which slows you down making it almost impossible to stay in front.

The new Pro-Controller makes it a lot easier to control the Kart. JTS/Atari have made use of buttons

Let's go karting with Colin Polonowski...

to and so forth is conveniently in under your index fingers.

The backgrounds and sprites are all well designed with silly sound effects but the music and sound FX are not so good. The music is OK but doesn't pack the Jag anywhere near its limits which wouldn't be bad if the sound FX were better.

Play on par. The engine sound quickly becomes irritating and I had to turn it off in the end.

One feature which the Jag version lacks is the battle mode. In the Super Mario game there is a section where two players can battle each other over a specially designed track.

Unlike the Super Mario version there is no battle mode where two players can race head to head over a specially designed track which is a pity. At least the game has a two player mode which gives the game some lasting appeal. Atari Karts is expensive but it is one of the better Jaguar games released to date. ■

■ Completing one of the Miracle Cup games will award you a better kart



CONGRATULATIONS

Well done, you've done it!
You're the new champion!

Publisher

JTS Atari
Tel: 0191 771 9334
Fax: 0191 770 088

Requirements

Jaguar

Price

Face-down graphics. Two player mode. Four difficulty levels.

Date

Unlimited number of tracks. No health mode. Poor sound FX.

Is it time to move on ... or is it time ...

✓ TO MOVE UP!

World's Fastest TOS Compatibles



**Direct[®]
60**

**Direct[®]
40**

Direct[®] XT

< 1 MIPS

Falcon[®] 40

< 4 MIPs

Atom[™] T1

< 8 MIPs

Direct[®] T40



Available by Special Order

Complete DirectT60 and DirectT40 systems include 400MHz Pentium[®] 100MHz hard drive, 320 MB Floppy Drive, 1.44MB Zip[™] (optional), card with NVIDIA[®] 4.1 ATI[®] Video, Keyboard, Mouse and are installed in an attractive Mini-ITX Chassis. Approved "Toshiba Case". Atom includes Direct[®] Toolkit + open source of software. Options can include larger hard drives, CD/DVD, more memory, removable drives and more! All Direct[®] computers are built to order allowing custom packages - all in for your personalized quote!

New!

Pentium[®]
on a PCI card!

Do You Need More Speed?

DirectT60 and DirectT40 have the latest new Athlon[™] T1000 in TOS compatibles, will outperform the most powerful reported by speedily TOS compatibles! Enhanced features include Intel's unique Direct[®] Toolkit, including image editing, file compression, rendering and image management, as well as high speed word processing (Word[™]) and Direct[®] will outperform your compatibility!

Just How Fast is it?

DirectT60 is based on the 120 MHz NEC 38000 32048 bit processor! Directing 600+ of the speed and power of a Pentium[®]! The board is a 32000 Direct[®] (enhanced file 20 MHz) Microchip to 32000 processor, offering 1.0 GHz processing power of a Falcon[®] 40. An example of a rendering card that takes Direct[®] into a Falcon[®] 40! For rendering, every processor can be up to 1000 times faster than Direct[®] 30.

How many is too不堪?

DirectT60 and DirectT40 are designed to not PC. 100% compatibility can often be had with PCI Express Cards, 100MHz and 100MHz drives, keyboards and standard PCI memory (RAM). Memory is expandable to 1 GigaByte via simple plug in standard RAM memory modules. Plug in a Future Peripherals PCI card for total DOS compatibility! Built in Canada by the company that brought you the Direct[®] 30, if compatibility goes unassisted, we have a team of technical support to assist you!

What about Compatibility?

Direct[®] Atom compatibles have always been known for their high degree of compatibility. Direct[®] T60 and Direct[®] T40 follow this path of high compatibility with compatibility. Compatibility is attained in T1000 with our new Direct[®] "Atom Direct[®] Toolkit" as a special enhanced TOS 1.44-1000 TOS processor. A high degree of high memory compatibility! Direct[®] toolkit application compatibility and lower than ever compatibility to Direct[®] Falcon[™], Digital Anticompatability and more! Direct[®] processors these new machines to be highly available!

DirectT40 Complete Systems

start at less than

**\$ 3399.99 Cdn.
\$ 2379.99 US**

DirectT60 Complete Systems

start at less than

**\$ 3799.99 Cdn.
\$ 2659.99 US**

100% Windows[™] compatibility with our Pentium[™] on a PCI card for Direct[®] T40/T60 and Hades[™] 4000 and 6000!

Run DOS[™], Windows[™], Windows[®] 95[™], and even Windows[®] 98[™] applications in parallel with TOS compatibility! This new PCI card for Direct[®] T60 compatibility greatly plugs into one of the four PCI slots and gives you complete compatibility! Support for SoundBlaster[™], Game Ports, Ethernet and more!

Available in the first Quarter of 1999!



Computer Direct

10001-121 Avenue, Edmonton, Alberta, Canada, T5H 1B9

Info + Support: (403) 499-24502-24, Fax Fax Line: (403) 499-2420



Ever wondered how the adverts in glossy magazines are produced? You know the ones like the Ad-Rat ad with the couple snuggling on a jelly made out of Kit-Kat or the Pigeon campaign where all sorts of things were shown with their colour changed to blue. These images are typical of the output from image manipulation software, usually the industry standard Photoshop, which is now available on both the Mac and PC platforms. Photoline is billed as professional image editing software for the Amiga platforms so can it deliver the goods?

Inside a smart colour printed box there is three floppy disks with a 48 page spiral bound manual. Two versions of the software are supplied: one for 386's with Motorola 68000 processors and one for machines fitted with at least an 80386 processor and a maths coprocessor - typically FPU equipped TT's and Palms.

Photoline runs in any colour resolution including monochrome although all internal processing takes place in 24-bit colour. In theory image editing could be carried out on almost any Amiga setup, although in my professional opinion the baseline setup is 640x400 in 256-colours.

Installation involves copying files from the master disk into a hard disk folder then entering your details into the registration dialog.

Photoline has a modern GEM-like interface with one model finding tool palette and dialog - making a high screen resolution even more desirable.

In Use

Anyone familiar with Photoshop can start work immediately - the programs are strikingly similar. Each image is displayed in its own window and a floating toolbar contains icons for all major functions. Typically clicking on any icon opens a dialog box containing options for that tool. For example, click on the *Erasing* tool icon and the dialog allows a choice between *Pixel*, *Road*, *Rubber*, *Filter* or *Copy*, along with an option to set the intensity of the tool. Instantly sets the degree of transparency, set to 100, meaning with red changes all the pixels under the brush to red. Reducing the intensity leaves the colour from the image. Additionally the brush itself can have a varying degree of transparency (all off - the edge of the

Photoline

Professional image editing on the Amiga? Graphics professional Ed McGlone puts us in the picture...



Photoline loaded up with a picture of my favourite cartoon character.

brush is more transparent than the rest).

Some of the other tools available from the menu and tool box include:

- **Paint**: A fill tool for areas of a similar colour.
- **Paint**: Painting tool used for blurring areas of the image.
- **Paint**: Applies any of the special effects filters under brush control.
- **Crop**: Selection tool for cropping parts of an image under brush control.

An undo function is available sometimes! Image processing is memory hungry and Photoline tries to conserve memory by only filling the undo buffer on request.

This means unlike Undo in Photoshop it's activated before carrying out a process and not after. The Undo I feel most users would prefer a conventional undo function with an option to choose if it's memory is tight.

Masks

The masking section of Photoline is extremely comprehensive and adds instantaneously to the power of the package. Any mask is a class of the familiar Photoshop *Magic Wand* tool which semi-automatic mask generation. A mask is any area of an image preferred from changes in the result of any process carried out on the image only affects masked areas. Click the *Magic Wand* icon in part of the image to mask out a

specific area of the image. For example a red *Paint* & *Eraser* stroke into the range of colours selected - a setting of 100 masks out the entire image. It only selects pixels of exactly the same colour leaving room for a smoother in-between. Another very useful option enables small batches of stray pixels to be ignored which means a low tolerance level can still pick out solid areas of colour. Areas can be added to the mask by shift-clicking, or removed by control-clicking. Once the mask is defined it can be applied within the image. During this process the edges of the mask can be adjusted over a user-defined number of pixels.

Masks can also be created using rectangular, circular or freehand boxes and can be adapted on themselves by clicking using all available paint tools. However, I have one gripe. Running the 386 and FPU version on a Palms 100, easily as fast as Photoshop running on a 486 PC, except for zooming which is much slower taking around a minute to magnify a complex image. This is very frustrating when trying to set the tolerance level for a complicated mask.

Another gripe is the lack of a zoom grid editor in progress. It's nice that you can off your face.



Filters

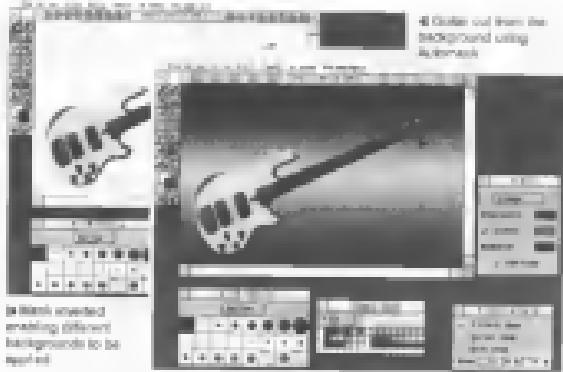
Photoline includes many filters which can be applied manually using the current brush, but are usually applied globally over the entire image - with or without a mask.

The supplied filters cover a wide spread of image processing needs including soft/no sharpen, several

different types of smoothing edge, colour, radial noise, sponge - they're all there and work well in general the filters are no potential in a probably works reducing the intensity level so the filter doesn't overpower the image. If none of the present filters are suitable there's a user programmable "Free" filter. Type numeric values into any of the 11 parameters to define how to set what happens to the pixel when it's processed. Good effects can be programmed, but unfortunately the natural effects over the course of the filter are unpredictable on the order of the day. Free filters can be saved or loaded at any time so if you come across a good parameter set add it to your library.

Color handling

Photoshop offers a broader area of colour than the basic image manipulator needs to understand. Often a scanned image lacks contrast or is too dark or light overall. Photoshop has some excellent tools for that type of work. The Colour Look Up Table (CLUT) dialog has four colour curves: one for the entire image RGB values and two for the Red, Green and Blue channels. Straightforward contrast and brightness for the image can be handled by two sliders and a checkbox is checked. The results can be seen as you work. Applying more complex colour manipulations of colour casts are handled by double clicking on one of the colour curves. A colour editor is displayed which allows the curves to be modified by自由地 drawing using the mouse.



creates great looking images even when reduced to a fraction of their original size. Enlarging images typically results in blockiness but amazingly Photoshop adds pixels in an attempt to smooth the image - the resulting image isn't as sharp as the original image but you can have your cake and eat it. The same resampling algorithms are also used in the Bilinear command which allows image reduction to 100 pixels or small as 0.01 of a degree and the results are always good.

Text handling

Text is well catered for in Photoshop which can use either Windows or GDI+ vector tools or WYSIWYG (or later). Typical everyday procedures

for example placing a line of text with a drop shadow can be performed without fuss.

Photoshop includes a basic vector graphics module designed to create and break lines and mask and can load or save CorelDRAW Vector Graphic (CDVG) files or GEM Metapost. Vector paths can be used to guide the paint tools enabling smooth curves and straight lines to be painted onto an image - superb.

By now you should be getting the impression Photoshop is a professional and comprehensive package and you'd be right. I've covered many filters, tool handling and rescaling because these are the tools of the trade but Photoshop has plenty of

tricks up its sleeve. Here are 8 space to cover in detail including

- Projection of an image onto a user defined 3D shape
- Warping - the distortion of an image by projecting onto a grid
- A whizzed "Smooth" abstraction effect
- Blurred effects
- 3D container brush types, with edit load and save options
- Lasso copies between images via Drag&Drop
- Layers can be used as brushes
- Colour selection and palette organisation via Drag&Drop

Most of the tools have hidden strengths which become apparent with familiarity. Photoshop will reward anyone who spends the time to explore its capabilities. No software is perfect but Photoshop is the best image processing software I have ever used on the Apple platform. ■



■ Changing the appearance of an image using Histograms, the CLUT editor and the Color palette

Scaling

Images can be scaled by a percentage or a fixed target size - optionally maintaining the aspect ratio. Impressive interpolation algorithms

Photoshop

Image Systems House
Tel: +44 175 722 0001
Email: info@photoshop.co.uk

OSX distribution

System Solutions
Tel: +44 800 080 2200
Email: sales@photoshop.co.uk
0169

Pro

Standard interface with range of tools and filters produces reliable results

Basic

Simplicity means slow processing, quirky tools but

Program failures and crashes

One of the most frustrating times working with computers is when a program crashes or locking or accidentally stops working. This can lead to loss of data or damage to the applications concerned - especially if data is lost in the process.

Sometimes, with experience, it is possible to figure out what happened but occasionally you just have to give up and stop working there. There are so many reasons why programs crash there is no panacea for all the 'What can we do?' start off thinking about possible causes which may well help you find a solution.

Reasons for failure

Corrupted program. If the program crashes at the same place every time it could be a bug. Before reporting a problem to the programme maker, save a fresh copy of the program, as others suffer the same problem.

Virus attack. There are nearly 100 different viruses on the Amiga platform but they are not omnipresent. Use a program such as the Ultimate Virus Killer (UVK) to check and delete any disks you are necessary.

Incorrect installation. If the program used an installer you may have made some incorrect selections and the wrong files have been copied over. Programming packages, word processors and DOS software are typically affected. Try deleting any files created and re-install.

Missing configuration files. Many programs need configuration files to run correctly working parameters. The result may be harmless or serious but the solution is the same. Re-configure the program and/or re-configure AmigaOS and save the parameter files.

TOS incompatibility. Old programs may not run correctly on later TOS versions. Look for a more recent version of the software. Anytime using TOS 1.0 or 1.02 should consider upgrading to TOS 1.04, 2.06 or one of the replacement operating systems such as MorphOS or Cores.

Hardware incompatibility. Some programs won't work with the

MMU MMU chip fitted to Mega 320 or the processor chip earlier on a Mega 64. Search all any hardware modifications, including processor accelerators (Overline or serial port modification) and see what happens if these hardware modifications are

Auto loader programs you may have to change their running order in the Auto loader. See below.

Incorrect file links with other programs. This is probably the biggest cause of program failure apart from bugs. It is also one of the hardest to solve because it involves thinking about other programs - not just the one apparently causing the problem. Most of an Amiga Auto loader programs and linking accessories to memory and these are often at the root of problems systems

Mark Barnes examines some of the reasons programs don't work as they should and what you can do about it...

Crashes before the Desktop appears are usually caused by a clash between start-up programs. Most of these are Terminator and Stay Resident (TStRes) which run at boot-up and remain in memory periodically performing some task or waiting for an event to trigger them.



Switch from one to another with other programs. Select Terminator or if it happens frequently turn on TStRes compatibility in the MMU configuration EPS.

2 Bus error

Occurs when a program tries to use memory that does not exist - or is not valid and inaccessible.

3 Address error

Occurs when the 68000 processor in an ST is attempting a 32 or 4-byte part in memory on an odd-byte location. The 68000 can only access 'even' addresses. This instruction is lifted in the 68000 processor in the TT and Falcon which can access bytes, words and longs anywhere in memory.

4 Illegal instruction

Occurs when an instruction is encountered by a processor that is not in its instruction set.

5 Divide by zero

Occurs when a program tries to divide something by zero. The result is undefined and unpredictable.

6 CRC instruction, indexing error

Caused by a special load routine in the 68000 processor called a CRC instruction. Some computers and programmes use this instruction to make sure that values into arrays are never negative and are not bigger than the size of the array.

7 TRAP instruction, overflow and

Caused by a special instruction of the 68000 called a TRAP instruction. If a program tries to add two numbers whose result is too big for the available storage space - an overflow has occurred.

8 Privilege violation

Occurs when a program is in user mode and tries to execute an instruction that is only allowed in supervisor mode.

9 Trace error

The CPU can be set to jump to a specific address after every machine instruction is executed. This address is normally used by programmers using debuggers to step through a program. If this address has not been set and a trace does occur then this error occurs.

10 Spurious interrupt

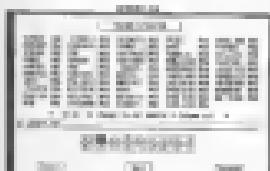
Occurs when a bus error occurs during a system interrupt, others may be consequences of the above, one row of books printed after another. My record is about 60.

Besides bus, other errors are interrupted by TOS and reported to the screen.

The fifth part of TOS can return standard error messages (code 0x0000) - usually these are displayed as an alert box:

Name	Number	Message
0x00	0	0x00 error
0x0001	1	Fundamental error e.g. Drive not found
0x0002	2	Drive not ready
0x0003	3	Unknown command
0x0004	4	EOF error
0x0005	5	Bad request
0x0006	6	Should command
0x0007	7	Seek error
0x0008	8	Bad seek head
0x0009	9	Unknown media (invalid head code)
0x000A	10	Sector not found
0x000B	11	No page
0x000C	12	Write fault
0x000D	13	Read fault
0x000E	14	Device error
0x000F	15	Disk is write protected
0x0010	16	Media change
0x0011	17	Disk was changed
0x0012	18	Unknown device
0x0013	19	Bad sector on
0x0014	20	Formatting
0x0015	21	Unknown other disk
0x0016	22	Invalid disk
0x0017	23	Sector not requested
0x0018	24	Unknown I

Information: If more than one of these is waiting for the same event or trying to access the same part of memory at this time your system is sitting on a time bomb! This is most likely to occur if you re-enter software written before clear guidelines were established, so if you spend 2 pages to stick with up-to-date software:



the function is equivalent to change the running order of programs in your AUTO file:

If the crash occurs before the Driveling appears run a series of boot-taps starting with an empty autofile and each time adding an additional auto file program until the crash occurs. The last program to be installed before the crash is the culprit - or one of them. Use a boot

manager such as Superboot or Almond of course you will have to re-order all the * PRG Manager entries to:

- * PRG and remove one
- * PRG to * PRG before each other if that doesn't solve the problem you may need to change the running order. Some programs expect to run first or last and obviously if you are using more than two of these there is potential for trouble. From TOS 2 onwards the running order can be displayed using the NoSort option in the View menu. To change the running order with the minimum of fuss use a utility such as Drsort or Autolock (widely available from PC/Windows Utilities or on-line services). Don't give up if it takes time, persistence, perseverance and doses of reboots to establish a stable system if you are running lots of extras. Desktop accessories can cause similar problems but maybe incompatible are much more. However if you are still experiencing problems with no Auto loader programs loaded install accessories one by one and if you find the culprit again changing the running order may solve the problem.

Bugs: the biggest culprit will always be bugs in program code. These are beyond your control and hard to track down. Try running the programs on a clean system which means no Auto programs or Driveling accessories - a boot manager makes this easy to do if the program is created at the same place or when performing the same actions you have probably found a repeatable bug. Please do take the time to report the details to the programmers along with your system details - don't assume someone else has reported it. A while back I was involved in a project near completion and reported a fundamental error which tests against over the previous few years hadn't reported - I guess they all thought it was so obvious everyone else had reported it!

Bottom

Most crashes result in the infamous bunch icons which appear on-screen. They're called generic exception errors and are the computer's way of informing you something nasty happened! The best thing to do is switch off your system for ten seconds or so then reboot. A warm

Name	Number	Message
0x0001	1	Unknown error
0x0002	2	File not found
0x0003	3	Bad seek head
0x0004	4	File not found
0x0005	5	Bad seek head
0x0006	6	Device not found
0x0007	7	Bad seek head
0x0008	8	Device not found
0x0009	9	Bad seek head
0x000A	10	Bad seek head
0x000B	11	Bad seek head
0x000C	12	Bad seek head
0x000D	13	Bad seek head
0x000E	14	Bad seek head
0x000F	15	Bad seek head
0x0010	16	Bad seek head
0x0011	17	Bad seek head
0x0012	18	Bad seek head
0x0013	19	Bad seek head
0x0014	20	Bad seek head
0x0015	21	Bad seek head
0x0016	22	Bad seek head
0x0017	23	Bad seek head
0x0018	24	Bad seek head
0x0019	25	Bad seek head
0x001A	26	Bad seek head
0x001B	27	Bad seek head
0x001C	28	Bad seek head
0x001D	29	Bad seek head
0x001E	30	Bad seek head
0x001F	31	Bad seek head
0x0020	32	Bad seek head
0x0021	33	Bad seek head
0x0022	34	Bad seek head
0x0023	35	Bad seek head
0x0024	36	Bad seek head
0x0025	37	Bad seek head
0x0026	38	Bad seek head
0x0027	39	Bad seek head
0x0028	40	Bad seek head
0x0029	41	Bad seek head
0x002A	42	Bad seek head
0x002B	43	Bad seek head
0x002C	44	Bad seek head
0x002D	45	Bad seek head
0x002E	46	Bad seek head
0x002F	47	Bad seek head
0x0030	48	Bad seek head
0x0031	49	Bad seek head
0x0032	50	Bad seek head
0x0033	51	Bad seek head
0x0034	52	Bad seek head
0x0035	53	Bad seek head
0x0036	54	Bad seek head
0x0037	55	Bad seek head
0x0038	56	Bad seek head
0x0039	57	Bad seek head
0x003A	58	Bad seek head
0x003B	59	Bad seek head
0x003C	60	Bad seek head
0x003D	61	Bad seek head
0x003E	62	Bad seek head
0x003F	63	Bad seek head
0x0040	64	Bad seek head
0x0041	65	Bad seek head
0x0042	66	Bad seek head
0x0043	67	Bad seek head
0x0044	68	Bad seek head
0x0045	69	Bad seek head
0x0046	70	Bad seek head
0x0047	71	Bad seek head
0x0048	72	Bad seek head
0x0049	73	Bad seek head
0x004A	74	Bad seek head
0x004B	75	Bad seek head
0x004C	76	Bad seek head
0x004D	77	Bad seek head
0x004E	78	Bad seek head
0x004F	79	Bad seek head
0x0050	80	Bad seek head
0x0051	81	Bad seek head
0x0052	82	Bad seek head
0x0053	83	Bad seek head
0x0054	84	Bad seek head
0x0055	85	Bad seek head
0x0056	86	Bad seek head
0x0057	87	Bad seek head
0x0058	88	Bad seek head
0x0059	89	Bad seek head
0x005A	90	Bad seek head
0x005B	91	Bad seek head
0x005C	92	Bad seek head
0x005D	93	Bad seek head
0x005E	94	Bad seek head
0x005F	95	Bad seek head
0x0060	96	Bad seek head
0x0061	97	Bad seek head
0x0062	98	Bad seek head
0x0063	99	Bad seek head
0x0064	100	Bad seek head
0x0065	101	Bad seek head
0x0066	102	Bad seek head
0x0067	103	Bad seek head
0x0068	104	Bad seek head
0x0069	105	Bad seek head
0x006A	106	Bad seek head
0x006B	107	Bad seek head
0x006C	108	Bad seek head
0x006D	109	Bad seek head
0x006E	110	Bad seek head
0x006F	111	Bad seek head
0x0070	112	Bad seek head
0x0071	113	Bad seek head
0x0072	114	Bad seek head
0x0073	115	Bad seek head
0x0074	116	Bad seek head
0x0075	117	Bad seek head
0x0076	118	Bad seek head
0x0077	119	Bad seek head
0x0078	120	Bad seek head
0x0079	121	Bad seek head
0x007A	122	Bad seek head
0x007B	123	Bad seek head
0x007C	124	Bad seek head
0x007D	125	Bad seek head
0x007E	126	Bad seek head
0x007F	127	Bad seek head
0x0080	128	Bad seek head
0x0081	129	Bad seek head
0x0082	130	Bad seek head
0x0083	131	Bad seek head
0x0084	132	Bad seek head
0x0085	133	Bad seek head
0x0086	134	Bad seek head
0x0087	135	Bad seek head
0x0088	136	Bad seek head
0x0089	137	Bad seek head
0x008A	138	Bad seek head
0x008B	139	Bad seek head
0x008C	140	Bad seek head
0x008D	141	Bad seek head
0x008E	142	Bad seek head
0x008F	143	Bad seek head
0x0090	144	Bad seek head
0x0091	145	Bad seek head
0x0092	146	Bad seek head
0x0093	147	Bad seek head
0x0094	148	Bad seek head
0x0095	149	Bad seek head
0x0096	150	Bad seek head
0x0097	151	Bad seek head
0x0098	152	Bad seek head
0x0099	153	Bad seek head
0x009A	154	Bad seek head
0x009B	155	Bad seek head
0x009C	156	Bad seek head
0x009D	157	Bad seek head
0x009E	158	Bad seek head
0x009F	159	Bad seek head
0x00A0	160	Bad seek head
0x00A1	161	Bad seek head
0x00A2	162	Bad seek head
0x00A3	163	Bad seek head
0x00A4	164	Bad seek head
0x00A5	165	Bad seek head
0x00A6	166	Bad seek head
0x00A7	167	Bad seek head
0x00A8	168	Bad seek head
0x00A9	169	Bad seek head
0x00A0	170	Bad seek head
0x00A1	171	Bad seek head
0x00A2	172	Bad seek head
0x00A3	173	Bad seek head
0x00A4	174	Bad seek head
0x00A5	175	Bad seek head
0x00A6	176	Bad seek head
0x00A7	177	Bad seek head
0x00A8	178	Bad seek head
0x00A9	179	Bad seek head
0x00A0	180	Bad seek head
0x00A1	181	Bad seek head
0x00A2	182	Bad seek head
0x00A3	183	Bad seek head
0x00A4	184	Bad seek head
0x00A5	185	Bad seek head
0x00A6	186	Bad seek head
0x00A7	187	Bad seek head
0x00A8	188	Bad seek head
0x00A9	189	Bad seek head
0x00A0	190	Bad seek head
0x00A1	191	Bad seek head
0x00A2	192	Bad seek head
0x00A3	193	Bad seek head
0x00A4	194	Bad seek head
0x00A5	195	Bad seek head
0x00A6	196	Bad seek head
0x00A7	197	Bad seek head
0x00A8	198	Bad seek head
0x00A9	199	Bad seek head
0x00A0	200	Bad seek head
0x00A1	201	Bad seek head
0x00A2	202	Bad seek head
0x00A3	203	Bad seek head
0x00A4	204	Bad seek head
0x00A5	205	Bad seek head
0x00A6	206	Bad seek head
0x00A7	207	Bad seek head
0x00A8	208	Bad seek head
0x00A9	209	Bad seek head
0x00A0	210	Bad seek head
0x00A1	211	Bad seek head
0x00A2	212	Bad seek head
0x00A3	213	Bad seek head
0x00A4	214	Bad seek head
0x00A5	215	Bad seek head
0x00A6	216	Bad seek head
0x00A7	217	Bad seek head
0x00A8	218	Bad seek head
0x00A9	219	Bad seek head
0x00A0	220	Bad seek head
0x00A1	221	Bad seek head
0x00A2	222	Bad seek head
0x00A3	223	Bad seek head
0x00A4	224	Bad seek head
0x00A5	225	Bad seek head
0x00A6	226	Bad seek head
0x00A7	227	Bad seek head
0x00A8	228	Bad seek head
0x00A9	229	Bad seek head
0x00A0	230	Bad seek head
0x00A1	231	Bad seek head
0x00A2	232	Bad seek head
0x00A3	233	Bad seek head
0x00A4	234	Bad seek head
0x00A5	235	Bad seek head
0x00A6	236	Bad seek head
0x00A7	237	Bad seek head
0x00A8	238	Bad seek head
0x00A9	239	Bad seek head
0x00A0	240	Bad seek head
0x00A1	241	Bad seek head
0x00A2	242	Bad seek head
0x00A3	243	Bad seek head
0x00A4	244	Bad seek head
0x00A5	245	Bad seek head
0x00A6	246	Bad seek head
0x00A7	247	Bad seek head
0x00A8	248	Bad seek head
0x00A9	249	Bad seek head
0x00A0	250	Bad seek head
0x00A1	251	Bad seek head
0x00A2	252	Bad seek head
0x00A3	253	Bad seek head
0x00A4	254	Bad seek head
0x00A5	255	Bad seek head
0x00A6	256	Bad seek head
0x00A7	257	Bad seek head
0x00A8	258	Bad seek head
0x00A9	259	Bad seek head
0x00A0	260	Bad seek head
0x00A1	261	Bad seek head
0x00A2	262	Bad seek head
0x00A3	263	Bad seek head
0x00A4	264	Bad seek head
0x00A5	265	Bad seek head
0x00A6	266	Bad seek head
0x00A7	267	Bad seek head
0x00A8	268	Bad seek head
0x00A9	269	Bad seek head
0x00A0	270	Bad seek head
0x00A1	271	Bad seek head
0x00A2	272	Bad seek head
0x00A3	273	Bad seek head
0x00A4	274	Bad seek head
0x00A5	275	Bad seek head
0x00A6	276	Bad seek head
0x00A7	277	Bad seek head
0x00A8	278	Bad seek head
0x00A9	279	Bad seek head
0x00A0	280	Bad seek head
0x00A1	281	Bad seek head
0x00A2	282	Bad seek head
0x00A3	283	Bad seek head
0x00A4	284	Bad seek head
0x00A5	285	Bad seek head
0x00A6	286	Bad seek head
0x00A7	287	Bad seek head
0x00A8	288	Bad seek head
0x00A9	289	Bad seek head
0x00A0	290	Bad seek head
0x00A1	291	Bad seek head
0x00A2	292	Bad seek head
0x00A3	293	Bad seek head
0x00A4	294	Bad seek head
0x00A5	295	Bad seek head
0x00A6	296	Bad seek head
0x00A7	297	Bad seek head
0x00A8	298	Bad seek head
0x00A9	299	Bad seek head
0x00A0	300	Bad seek head
0x00A1	301	Bad seek head
0x00A2	302	Bad seek head
0x00A3	303	Bad seek head
0x00A4	304	Bad seek head
0x00A5	305	Bad seek head
0x00A6	306	Bad seek head
0x00A7	307	Bad seek head
0x00A8	308	Bad seek head
0x00A9	309	Bad seek head
0x00A0	310	Bad seek head
0x00A1	311	Bad seek head
0x00A2	312	Bad seek head
0x00A3	313	Bad seek head
0x00A4	314	Bad seek head
0x00A5	315	Bad seek head
0x00A6	316	Bad seek head
0x00A7	317	Bad seek head
0x00A8	318	Bad seek head
0x00A9	319	Bad seek head
0x00A0	320	Bad seek head
0x00A1	321	Bad seek head
0x00A2	322	Bad seek head
0x00A3	323	Bad seek head
0x00A4	324	Bad seek head
0x00A5	325	Bad seek head
0x00A6	326	Bad seek head
0x00A7	327	Bad seek head
0x00A8	328	Bad seek head
0x00A9	329	Bad seek head
0x00A0	330	Bad seek head
0x00A1	33	

The Spanish Atari scene

Andrew Harvey looks at a small but determined Atari community in a part of Spain off the tourist track...

Andrew Harvey looks at a small but determined Alpine community in a part of Spain off the tourist track...

Imagine being an Atari user in a country where the majority of software is in a foreign language and where the number of suppliers of hardware is declining rapidly.

I'm thinking about Spain, not the UK, although the economic data have a familiar ring to it. I visit Spain several times a year and often wonder if there ever was an Alastair government. I had never seen an Alastair composition for sale.

I was with surprise and curiosity I
crossed across the fields
for an Alsatian group in
Vallendar in the course of
a year in an old copy of the
Fernan Around a year ago
attended an annual flea
market there so to satisfy
my curiosity I joined in the
group. Since then and over
the course of the year I've
kept in touch. It's been
interesting to compare
how they have they have
developed and changed
compared to the US. And
so on.

I first made contact with Fernando Camargo in 1959. He was known to the group as Fernando's party because he derived a name "Spanish" TT and partly because it means "the Fernando" - and had a vertically challenged Meeting Fernando made a pleasant diversion from classical music. He told me about the Paxton group ("Paxton State" singalong "For the Moon")

A local clogger shop used to provide a free meeting room which resulted in the formation of the Paisley club. Unfortunately the shop closed but the group has carried on meeting at each others' flats or houses for nearly three years now. The members each pay a small amount for rent, coal, a running costs plus a little more to obtain their hardware and materials to try out. They are also in contact with similar clubs in other parts of Scotland who, although not club members, are happy to advise and support where

they can. Of the fifteen countries in 1985, two had TPs, four Palcos and the rest STPs, and using their machines for tasks such as DTP or typesetting.

I recently contacted Joseph again who brought me up to date. Over the last year two hardware suppliers have folded down and Foxwell has lost Fernando, the original garrulous but smart engineer and his TT and left the group, which obviously hits him rather negatively. It is still all down and gloom though! Joseph has taken over from Fernando and is unfortunately in promoting the use of the Ami for the Internet. He's

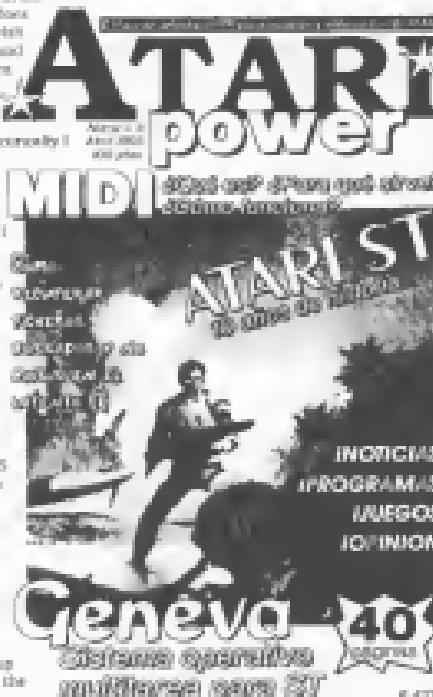
setting his own wire traps and a tether for the French by site. **Immaculately**
Joseph uses 500 and 1,000-m and a happy to help Spanish Biscay get.

so-late. The group produces a 32-page A5 photo-sequel) banner called "Moto Power" which is still going strong. The content is impressive, with well-researched articles and great signed-up parts from many glossy magazines to choose. "Moto Power" is produced by Kike who lives in San Sebastián (a small coastal town on the north coast) using Fernando's old TT - with being part to good use. If you are Spanish or learning Spanish, why not subscribe to "Moto Power"? Subscriptions cost a mere £10 per year (200g) per copy plus delivery. Contact www.motopower.com

Barriador Barcelon Tarragona
6-473-20017 San Sebastian
Gipuzkoa, Spain
Finally there are places to expand a
water group meeting in Barcelona
Please get in touch with Chis Ferchak
for more details Email
Chis.Ferchak@tiscali.it

100

PROBLEMI ST/TT/Valencia University
Group: Juan-José Ferrero, c/la Vila 8,
ED 947000 Valencia, Spain.
Email: jose@mat.upv.es or [jf@mat.upv.es](mailto:jjf@mat.upv.es)
Webpage: <http://mat.upv.es/~jf/>



Prenauta agust and two other club members. Agustina has been using computers since the Spectrum era, and now enjoys writing utilities and adding to the very pool of native Spanish programs. Joaquin also programs (as do the majority of the club members) and has recently completed a tracer program for the Megabit and TT. He also has internet access via the University making him the natural source for the latest PCShareware releases.

I wonder if...

Jimbo Hornby, founder member of the Atari Wrinkles Club, is full of wonder...

"The all knowledge and wonder (which is the need of knowledge) is an impression of pleasure in itself."

Plato, Republic 561 A.C.E.

ATARI WRINKLES CLUB

A couple of months ago I had a letter from one of the Wrinkles saying he had "preserved the photo for four years" and that recently "The joy of finding things out had evaporated" for him the last year period in over. From his collection of well over 200 photographs only a dozen or so now seem much use.

I know we all hit this stage of maturity more or other. I know I did. I bought my first computer in 1982 an Atari 1040STFM, simply because it was on display in the shop. After fiddling around I managed to get the plug to the end of the wire after several journeys back and forth to the shop I eventually got up and running nobody told me I needed a disk in the slot to get to the desktop - who needs documentation? (Ed. I guess Jim does) because it puts that bug through the denting will appear without inserting a disk)

It took me about six months to get to grips with the thing, mainly because the jargon was a complete



ATARI 1040STFM PHOTO: R. H. H.

mystery to me. It was wonderful. I added everything I could think of to the library - word processors on every imaginable topic and generally till I was exhausting my knowledge.

The months passed by and I started to wonder if I was using my machine to its full capacity - what, do I do next?

I considered if there are any other services around to the same level as me. A brief letter to ST Review (I got the Star Letter Price on Friday and the Atari Wrinkles Club was born). After the glossy magazine closed we removed our age restriction to welcome wrinkles of all ages and we

presently have approximately the same number of members as our average age. One other thing about the point Atari are in that most members ask what they can do for the Club instead of what the Club can do for them.

I am retired and can easily spend ten hours a day sitting in the spare bedroom sitting at the keyboard and I enjoy every minute. There's always something to do apart from reading the Club magazine. My favourite saying is "I wonder if..."

I wonder if...

I ever find a place of Clip Art to suit that situation or this story? Can I find an image I can alter or shall I create my own instead? Can I figure out how the programme did that? Is there a programme to do this? If not could I write one?

Without much effort I could fit this magazine with ideas but that would defeat the original thought behind this article. I wonder if I can write an article to start a new thread.

If you're wondering what I mean by a "new thread" I wonder if you will take the trouble to find out?

My system has adopted a new colour palette. Today and lots of other stuff. I wonder if my vote at the next general election will result in a pension increase so I can afford a colour flat bed scanner? I can dream can't I? Oh well, it's getting late and I need my beauty sleep. I wonder if my wife has still got her breakfast?

I wonder if I could find a suitable quotation to add to the end of this article and I wonder whether Jon will eat it?

"Name of three acrobats print out as one?" The Wrinkles club has 600 membership fees but new members are asked to send 20 second class stamps as a one off payment to help towards postal costs. Write to Jim Hornby at:

60 Cromwell Street, Shirley Wood, London, SE2 8BL Telephone: 0115 251 3364



"You don't even talk to me any more!"

We believe our Reader disks offer outstanding value for money and many subscribers have asked to receive the disk with the magazine. However we appreciate that many readers wish to see what is on the disk before deciding to buy it. So for those people, we are pleased to announce a new service! Reader disks are now available on an issue-by-issue basis for just £2.50 (inc. of UK post and packing) £2.75 (Europe) £3.00 (Rest of World). So if you ordered one on Issue 1 there is a chance to complete your collection.

Please make all funds payable to the "Atari Computing Group" and send orders to:
 Atari Computing Reader Disk Order,
 "West Street" Weston Crescent
 Johnstone PA5 8BB SCOTLAND
 UK. Cheques/Postal order
 Sterling Eurocheque/Post office
 payment Chequebook/ Sterling
 Post Office Payment International
 Money Order (rest of world).
 International Money Order
 If your copy of Atari Computing is delivered from one of our distributors please obtain your Reader Disk from them.

Reader Disk: AGDF1

CGM/Tech v1.0 Exclusive, Freeware, Jorgen and Uwe Hollenstein Tribute to Star Trek in pure CGM based battleshield game

ST5500 Codes v1.4 Freeware, Mark Gamma CPC to Amiga location from ST5500 code and vice versa

RS232C Device PD, Martin Cudby Ease serial port problems using Crosslink between Amiga+PC

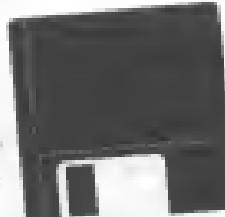
ST-Quide v1.0 Freeware, Helge Wenz Hypercard viewer, includes Amiga standard utility

Applian v2.0 Freeware, Helge Wenz, MacGIC using Windows 95 style look and much more!

CGM's Utilities Shareware, Gary Priest Utilities online User with QASOURCE, CGMOS, CGMOS MINTTime and STIME.

Show Me Up v1.1 Lite Freeware, Thomas Macho Shareware, Macintosh only Windows 95 style Start button and much more!

Starting subscribers can upgrade their subscription to include the reader disk. See the subscription form on page 52 for further details.



Reader Disk 2

We're delighted to present two heavyweight exclusive editions to complement articles in this issue.

Thing v1.0Bn Exclusive edition

Shareware
 Arno Ninkov and Thomas Blaurock



downloaded animated pages. The mouse pointer changes to a pointing finger and displays the link in the window status bar and animated GIMP are supported.

ST5500 Compiler Pro version v1.0 PD

See Overview

ST5500 officially only supports TOS versions up to TOS 1.62 but this PD does convert files for up to 10 different TOS versions into ST5500 programs if enough disk space is available which means your integrated programs can run equally happily on a vintage 1985 TOS 1.0 ST and the latest Falcon TOS 4.04.

AVR and STW format samples

PD

CGM's Samples

This sample collection was created using Sound Chip Synth to accompany the review in this issue. The AVR files can be played using Atari's own System Audio Manager (SAM) and many other utilities. The STW files are for use with Sound Chip Synth.

Did you hear anyone say "Gigglepig"?

Author: Donald A. Thomas, Jr (024/496)

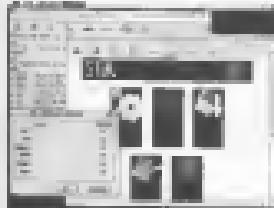
On Tuesday July 30 1991, Atari Corporation presented its share to ITI Corporation - a disk drive manufacturer. Recently just moved out of its Sunnyvale headquarters without even saying "Goodbye" and off about it. ♦

Shareware and public domain

CAB

Communications
Freeware, all Atari

Roy Goring takes a look at the Atari Computing exclusive release of CAB...



Atari software can now be run using OVL or CAB. The latter only page generated by Mattias Flötham consists of the latest OVL-based software.

De spite being the only graphical web browser available the graphical features in each release has reached near the interactivity of a major product fully implemented CAB now download and display text files having empty spaces which are subsequently filled with images in practice this means you can scroll up and down pages while images are being converted and follow links to other pages without having to wait for converted images to be displayed.



A fast and economical tool. Using an empty box as illustrated in the background image (images are now hidden after the box).

Anticipated GIFs

CAB can now display optimised GIFs as horizontal or static. Optimised GIF files contain a series of images which can be used to attract attention or convey meaning depending on your point of view.

It's not its point

The cursor now changes to a pointing finger when moved over a link and the link address is displayed in the window status line. This helpsfully reveals whether the link is to a different web site or a different page or somewhere else on the same page. It also makes links on multi-columned pages easier to find.

The Print function have been optimised yet again and are capable of full colour output given the status combination of printer and suitable VME driver. However there are still some ugly problems to be resolved.

Cache back

Run an off line session after upgrading to the CAB version because the cache structure has been changed and can take several minutes to be converted depending on the size of your cache.

The new structure contains a series of folders, labelled A to Z, and this list sequentially as follows: File structure goes in A: 00000002 to 0: 00000003 to C etc. This makes for much faster disk access with large caches compared to the old method of storing everything in a single folder.

Using a particular file is much like finding a needle in a haystack so drag a copy of Cache file and turn those contents into something more manageable.



Cache Ed is the easiest way to access cached files.

CAB offers 90% of the functionality of Netscape or Microsoft Explorer which is a remarkable achievement for a program capable of running on a standard XT.

There are still major problems with the CAB/GIF module and STB, but as any come confirmation will admit it goes with the territory. CAB has CAB is very solid.

It's able to use standard Pause support implemented instead of the half-baked, but usable mechanism in the current release. An option to download pages and images while browsing in (not only mode) would be a great help and save the on-line time wasted while CAB converts images for display. Other this option could be triggered on again to view the images.

Surfing

Apart from CAB you'll need an Internet account, STB and the CAB OVL module. In the UK several accounts are available from £7.00 per month upwards. Check the provider supports the NCP or CICP protocols because some don't. STB is the TCP/IP stack which connects to your computer to the web using your account. The CAB/GIF module with on-line browsing capability to CAB and is not required for off line browsing. Cache Ed, SOCAPIRIC PIC and RUMI are all available from PCShareware. Utilities and on-line services. Please register any programs you use regularly - it's the best way we, as users, can receive continued support from the programmers.



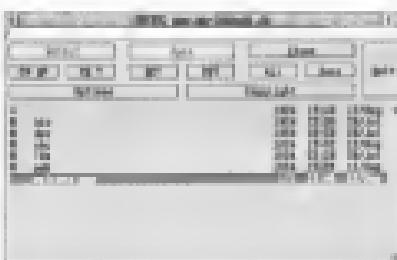
MGFTP V1.3

Communications
Public domain, all Atari

MGFTP is a C64-based File Transfer Protocol (FTP) client program for use with ST/PC. It allows you to logon to remote servers and transfer files to and from your computer.

MGFTP displays the directories and files on the remote server along with their attributes, in a C64 window as either icons or text. This makes it easy to navigate remote file systems by just clicking on directories in much the same way as using the desktop. Files can be downloaded by clicking on them and the transfer is displayed graphically as a progress bar.

The Select button displays a server list where the address of servers can be inserted, edited or deleted. Double-clicking on any entry activates ST/PC which tries to establish a connection. When it



is successful, is displayed at the top of the main window when you are returned to it.

The Login procedure is the same: server can be configured via the Enter button. The username, password and the port number can be set before selecting OK to begin the login attempt.

The default login details (Ftp and page email address) typically log you in as a guest on the Ftp server.

where you can access all public directories. If you have your own website simply enter your account name and password and you can access your home directory which makes MGFTP the ideal way to maintain your web pages. To logoff select exit/File/Close button.

The Options dialog includes the upload and download paths, anonymous login, user name/password, monitor display. A protocol window can be activated to monitor the communications between MGFTP and the server - useful to help diagnose problems.

MGFTP requires just over one meg and on re-booting a server takes you to the same directory you were in last time you logged off. If you use ST/PC and need to access its servers MGFTP gets the job done with the minimum of hassle as easy to use point and click interface.

Steve Miller



ST NEWS

Disk Magazine
Freeware, all Ataris, HD or 2MD minimum required

This is the final cutting for this revised and long awaited Atari computing magazine edited by Richard Karwowski. I am sure his *Ultimate Atari Guide* (2002)

ST News has an absolute reputation for the quality of its articles and high standards of fitness. In terms of quality and quantity this final issue does not disappoint. It is a double size issue containing not a single dead link.

The plain DOS lookalike shell coded in QBasic is slick to use and doesn't distract from the main business of reading articles. Understandably this issue is concentrated on culture, including articles celebrating and reviewing the passing of this publication.

The majority of the editorial coverage is non-computing related including some excellent fiction and music related material. Several comprehensive reference works

including the ultimate game cheats, recycling hints and ultimate disk magazine could my eye, amongst all the other action lighting for my attention.

Unfortunately ST owners still without a hard drive (or large 3.5in disk) will not be able to read this issue which probably makes it worthless.

copy from two archived files distributed on two double density disks.

ST News have gone out on a absolutely brilliant final issue and will be missed and remembered fondly by its many fans in the Atari community.

Chris Marshall



**STOS COMPILER FIXER V1.0**

85%

Utility
Public domain, all Atari

As most STOS programmers are aware, compiled programs have to be fixed for use on different machines and TOS versions. This has always been a pain and makes STOS programs less than professional. Recently a new generic fixer program was written by Anthony Jacques based on this code by Lee Greenough. This fixer allowed the programmer to pre-fix a compiled program for up to 11 TOS versions before making it available and was a great improvement. However, Lee has now gone one better with code which

patches STOS programs during compilation! The compiler fixer is tiny, just a small STOS-washer file containing function fixes and a selection of DCF777.GIF files identical to those produced by STOSFixer programmed by Robin Quenette. To patch a file load a copy of the compiler assembly into the STOS editor, merge in the fixer source and save it as again. Now copy the data files into your COMPILEDIR folder and re-compile STOS! On compiling a TOS-

program, tables for the appropriate TOS version are inserted into it and everything should be fine. Up to 11 data files can be used which means programs can be made compatible with more TOS versions. It is a real shame this wasn't available years ago but better late than never isn't it? An essential utility for all STOS programmers.

Martin Miller

**ZCONTROL V0.24**

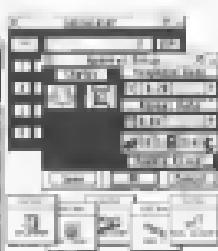
90%

Utility
Shareware, all Atari

ZControl is a replacement for Atari's own XControl program and of several recently released alternatives. Although widely used, XControl suffered from some locking bugs so any improvement has to be welcomed. ZControl does the job with the bonus of being able to multitask CP/M. This is the first release capable of running as a desktop accessory under TOS; previously ZControl only worked under each tasking operating system. To install ZControl as a desktop accessory under TOS, replace ZCONTROL.ADF in ZCONTROL.ADF and place in the root directory of your boot partition or drive, then reboot. Under a multitasking operating system you can launch ZControl from the desktop or auto-launch it by placing it in your auto-start folder. Under

operating systems which support multitasking ZControl can be configured on startup. The first time you launch ZControl you'll be informed there's no ZCONTROL.ADF so make sure you select the settings option from the pop-up configuration. ZControl has your requirements and uses your settings. ZControl can be keyboard controlled, including ST-Guide format keyboard help, and supports the most standards including mostly twigit/clip and the AV-Protocol. ZControl is much nicer than XControl and I only think of a good reason for sticking with XControl. The ability to auto-start CP/M, regardless of booting both located and to their previous positions.

Martin Miller



BPM 62%
MIDI/Music
Postcardware,
all Atari (ST Medium, not
compatible with MagIC)



BPM (BPM Counter) is a disk-based utility for 68k and direct machines. As the name suggests BPM (Beats Per Minute) Counter is a tempo counter. Unlike similar utilities BPM offers two ways to approximate the tempo. Either hit a key on the keyboard for each beat or more interestingly hit a key when the beat begins and another key when it ends. Both methods are accurate enough so if you need this facility BPM Counter does the job. There are however, a couple of limitations: BPM requires ST medium and does not run under MagIC.

Carl Edgerton

PLAYSID 030 V1.0

Music/MIDI

Freeware, separate Falcon and STe versions

80%

PlaysID was written over the summer of 1990 by German Demo master Orman. PlaysID is a Falcon/STe 32 voice player which almost perfectly simulates the Sound Blaster (SB16) chip in that it uses 8-bit computing. A selection of tunes from legato games is also included, as nostalgic fans can hopefully enjoy classics from the good old days, along with several famous Bob Hubbard compositions in their full and unadulterated glory. PlaysID is one of those pretty TTF programs but at least it displays a small title screen while the music is playing.

Along with various key options to control the volume and individual sound channels, Falcon owners can enjoy stereo sound output. It is also possible to save up to ten sets as the Auto-Pan function before reusing PlaysID and then alter the sound quality using the DSP, although I must point out that the standard PlaysID is highly recommendable.

For anyone interested in sound chip generated sounds or retrocomputer nostalgia

Chris Holland

DUMP-IT 2.31 90%



1 MIDI/Music

Shareware £5.00,
all Areas

A few months back, release Beta 1.1 of a System Exclusive dump manager, Dump-It, has finally been released. If you are a GM synthesizer owner, a dump utility is essential. Dump-It deserves the need for



expensive ROM cards by saving patches for other synth modules and sound cards directly on your hard disk. One of the most important changes in this release is Orca 3.0's ability to receive SystemEx. Other features include full request control, the ability to load and save in other formats (including M3U), the licensing, supports SCSI Cards, documentation and much more. Dump all other System Exclusive managers you have around, it's been a long wait, but Dump-It finally seems all

Carl Edgerton

76%

GEM-REC96

MIDI/Music

Freeware, Alan Falcon/STe only

GEM-Rec96 is a two track direct-to-disk recorder programmed by Craig Dronzinski. Since I last wrote about GEM-Rec, some significant developments have taken place. The two most important changes are

- GEM-Rec96 now supports DSP effects, you can use the effects from Wobbler

• The two-track editor has (unfortunately) been completely removed

There are plenty of hard disk recording applications for the Alan Falcon but GEM-Rec96 is definitely easy to operate. It is almost impossible to go wrong! It is a pity the internal editor has been removed but development is proceeding in a sensible direction. Let's hope Craig gets enough encouragement to continue development.

Carl Edgerton



GEM-Rec96

©Craig Dronzinski

1996

more information

BAD MOOD



Martin Miller takes a look at the Bad Mood project, one of several Doom clones under development for the Falcon...

The project is being programmed as a generic game engine rather than a Doom copy clone. However Bad Mood itself will eventually develop into a fully playable game in its own right - to demonstrate its capability that Modo supports 16-bit

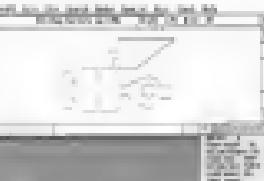
Truecolor graphics with a variable timestep up to 100000 frames (similar to Id's) Generic Doom, Doom II and even the IWAD files are supported directly. The entire scene, including the walls, floors and ceilings are perspective mapped and textured with wraparound sky textures and scaled player movement. Processor accelerators such as the Afterburner64, are supported through the raw patch is provided by the Falcon's DSP chip FastRAM compatible. The source is available from various FTP sites.

Parameters can be passed to the program via the command line, for example passing the IWAD. Modo will determine which episode/mission you are warped to.

Once the program has loaded all the data and performed its initial initialisation you can press the Space bar and start wandering round the game levels. Movement is controlled via the mouse or keyboard cursor keys with mouseons to control the rise/wall/step, change the size of the viewpoint and so on just like the real thing. A ghost map can be toggled on/off, this gradually builds up as the level is explored. This is itself is something weird where all the corridors and doors lead...

Tested up

To help the members of the Bad Mood team develop the program, a number of useful tools are under



At Designing a level in game mode

development.

FalconWAD tool allows the contents of a IWAD file to be examined in detail and samples player graphics stored, etc.

GM4DEU allows levels to be created, edited, saved and viewed (via Bad Mood itself). Player start positions can be defined, objects added or removed, etc.

Batched allows Bad Mood to be run from a GM4D instance. A list of program commands and list of IWAD files can be batched.

State of play

Although none of the tools are still under development, it is currently possible to design your own levels, objects and to incorporate your own graphics. As a target market the intention is to eventually produce a Bad Mood specific IWAD file format which will avoid copyright problems using IWAD files not commercial ♦

ATARI
COMPUTING

Christmas is almost upon us again and you must all be wondering what your nearest and dearest could buy you. Show them this.

To celebrate the launch of Atari Computing we had a limited number of unique Atari Computing T-Shirts made. These were on sale at the Atari shows at both Birmingham and London and sold very well.

They are white with the black and yellow "Atari Computing" logo on the left breast. We are now able to offer these (while stock last) to anyone who didn't make the shows.

Cost (including p&p) is £8 each (remember to state your size - Medium, Large or XL, XXL, Large).

Those of you of the shows may also have seen the mouse mats we had made. These are very high quality thick rubber mouse mats with the black and yellow "Atari Computing" logo. Cost including p&p is £9.50 each.

Send your cheque (payable to Atari Computing) to ALC 102,
T-500P, Weston Rd, after "Data Master", Weston, Bristol
BS10 5AB. And remember to include your address.





Since Magazine started life over six years ago we have relied on the contributions of Amstrad users for articles, news and the latest design. Interviews have always proved popular so from the Magazine archives this time around comes an interview conducted over the telephone with Michael Burkley - the man behind the Suzy B's Software Treasury CD.

Next up is an informative article from a Norwegian guy called Karl Eggersen. After hours. Now working over in Toronto, Canada, Karl explains how writing for disk magazine helped improve his writing skills and ultimately his pod has got a job.

There's an article from a contributor to Magazine, telling us about the Amstrad course there and finally a review of a new game/disk-catalogue called Racunsoft which is probably the best Amstrad style game to hit the Amstrad scene so far. Disk copies of Maggie are available from most PC dealers including Goodwill, Morris and Happysoft. If you have any comments visit our site and say hello to the Amstrad section of our newsgroup mailing list.

Maggie is also available from 42805 on 01223 803106, download a copy today!



Richard Spoorwijk and Chris McLean
the Maggie Team

Suzy B recently gave us a CD-ROM called 'The Suzy B's Software Treasury'. Here's an exclusive interview with Michael Burkley - the man behind the compilation...

Can you give us a brief description of your early life, school, work and so on?

I grew up in a single home in a small town in New Jersey. I started Remington after the American Indians who lived nearby.

What is your earliest memory?

I can't say much I mean it's a long time ago. I can say that the home had only about 100 people in it when I was growing up (it was a community of racing car).

Is there anyone who inspired you about the need to find a hobby and what difference it makes to life?

I was always interested in science and especially logic as early age my career would be in those fields. In high school I had a molecular biology teacher and a chemistry teacher. I began the University of Maryland as a biochemistry major and in my junior (2nd) year I switched to Chemistry and then when I switched because I was thinking about going into teaching. To cut a long story short, I graduated, moved to Massachusetts to go to Gordon College Theological Seminary and got my BA (then my MA) and married for a year and half later went to school for three years and never left home again up until my master's research class. I purchased half a cottage for three years, went back to school for a year and a half a teaching in a church in Wethersfield, 'Read Magazine' we had a baby boy and finally graduated, eight years later a complete program that I suggested to take only three years! We had another baby girl (now a wonderful girl). Then I bought a second hand IBM with a single monitor, a color monitor and 320K available. It was great and that took me straight into an answer to the next question.

How did you get involved with the Amstrad scene?

I first learned about the Amstrad ST when I read an article in Byte magazine about the new 1040 ST. It was the cover story and it told about how the Amstrad was the best computer that was selling for less than \$1 per kilobyte of RAM (that I may have stated for 1988 US). It sounded great and so I started a store up and decided to use for cover name that I usually just say "Computer Cost of a 1040 (16K of RAM) and needed some software to run on it. One day in 1988 I saw a BBS (bulletin board system) in a magazine that had a Amstrad 1040 computer. After writing the disks and writing programs and discussing the stuff we wouldn't use well we didn't have much

left. And so we were encouraged, after nearly two years of work, Suzy B's Software was born. We've had no business for about five years now. Suzy and I run Suzy's Software from our home. Shaking up the world between us, we run Suzy's Software the rest of the business while I work through the 1000's of copies I have to bring the best to Public Domain/Shareware offerings. Suzy manages both house and implants while Michael is the pastor of the Phoenix Presbyterian Church and the author of 'The Undeathful Amstradophile', an ongoing series of articles that were published in Amstrad Pages 1-400 in 1990.



What is your local Amstrad scene like in your area (for instance, relatives who support the Amstrad range, local user clubs, etc.)?

The local Amstrad scene is rather sparse in Niagara Falls, NY. The closest Amstrad users are in Ontario (near Toronto) though. They are all just good people whom I like. One other group of users used to live here in a local apartment, but didn't last very long.

What, in your opinion, is the best Amstrad game to appear in the last 10 years?

Any Amstrad game that is running up the best one is hard. I've only had the privilege to attend four shows out here back in 1989, the Phoenix Amstrad Convention in AZ, and the 10th show, and last year it was in Connecticut. All were wonderful.

What are your opinions on piracy, and the Amstrad?

Piracy should be forced to write a decent and useful commercial program and then have everyone else rip it off and free about it. The reason is wonderful, it absolutely pays for my trip to Germany, England, New Zealand and Australia, among!

Any other comments?

Thanks for the opportunity to sound off. I'm also glad to tell you a little bit about Suzy B Software. I hope you'll buy one (or more) of our CD's and Michael R. Burkley, 'The Undeathful Amstradophile' at Suzy B Software. ♦

Writing for disk magazines such as *Maggie* can certainly enhance future job prospects, as Gerd Eggersbo Abrahamson found out to his credit earlier on this year.

I know this sounds a bit like heretical but disk magazines have played an important role in my life. In 1985 I spent my time playing games and watching them programming simple games. Basically I was a bore. At this time I started at high school and enjoyed to concentrate on software and learning new things, but several factors influenced the direction I took. I had just found RT Klopfer, the magazine ST News since while lead me to ST News and Maggie and I was soon writing stories for various disk magazines. The main areas in Germany was Germany and I was eight in the middle of it. The writing disk magazines learned and my German teacher gave me the writing book and I started writing short stories and poetry. I continued programming which continued and the writing was a very natural thought. I mentioned that memory through high school and college and I became an important contributor which gave me lots of confidence. Before I got college I started writing of the public library and my dad and they also stimulated my development. When I came back to the ship person I was back to PFS. I had the one I learned.

Writing for Maggie and ST News has turned me into an active writer, computer engineer and co-editor/programmer of the Acid disk magazine *Horizon Computer Systems*. The new emerging horde was taking a full time job. I did not like it. However I had recently met an American girl friend and the idea to look for jobs abroad especially the UK. My intention writing for disk magazines had given me the confidence to try anything and I started a job offers website it does from the UK through the internet. Unfortunately nobody wanted to do the paperwork to get the press card. However I was posted to Oxford and started a publisher of the *UK300* and learned books, the *Corporation* was attending a conference in Oxford and would interview me. After this interview they offered me a job. I was offered a one year job as systems administrator in Germany but with no promises after that. Steffen Fockendorf whom I know via ST News was now a programme at Grey Matters in Canada and they were looking for programme I highly valued my band was incorporated to Grey Corp author of *Blasteroids* and owner of *Grey Matter*. Grey update it was all the other related stuff I had done which interested him and within a few days I was hired and accepted a job to Canada. Four months of paperwork later I was on a plane to Canada where I began a new life and family.

Writing for disk magazines turned me from a bore into a writer and changed my life forever I could never have imagined at the time. **•**

Running

At the Symposium '96 party held in Hamburg, Germany we saw a demo version of *Running*, a Doom clone for the Falcon...

Running evolved from Doom, one of many Doom clones in early stages of development shown at the Fried Hall 12 meeting party held over Easter '96 in Germany, Germany.

The quiet German behind *Running* are Star Developments who took it to a second stage others have failed by bringing a Doom clone project to a successful conclusion. All the basic elements are already in place including a real status panel, a first person congressional gun (borrowed from Duke Nukem) and some real bad guys.

Running is an excellent example of the game with fast, smooth updates and genuine Doom instant frags and bad guys.

To keep things moving along an unended 100% is Falconoid the Stars and Stripes are scattered in contrast to the fully textured walls but if that is the only compromise needed to keep the game playing smoothly I reckon *Star Wars* does an excellent coding job. There is an excellent firstperson view map selection which is well done and can be walked through just like the real Doom. A continuous, longest-dragging weapon sample loop. Dot snapshots on a basic edge with the expected power on opening door panels and



▲ *Running* will be the last 3D Doom clone to be released for the Falcon?

convert along with the status, buttons and weapons. Not the game demands. There is still some work to do, especially the bad guys are too easy to kill for my liking. Multiple weapons (guns are not present in *Running*) is an option on the status panel which doesn't work yet. A level designer uses textures and more bad guys (please back the difficulty level upwards) are planned along with a modern MD4 first Deathmatch option so you can fire up your friends via a cable or over the phone. *Star Wars* received another six months work should see the project completed and I for one can't wait. The demo version is available now from PDS/Showcase libraries and certain services. **•**



▲ The 3D Doom clone *Running*.

You've switched on your computer and a plain Desktop appears with a couple of drive icons, a trashcan and a few menus. If that sounds familiar you're probably still using the built-in DOS Desktop...

Desktops R Us

Welcome to the first collaboration between Atom Computing and *AmigaFile*. Most of the work has been done by Ken Denehy and Joe Cooney with a couple of tips from Duncoll Dods and myself. *AmigaFile* #4 is crammed full of features with the added bonus of some personal views and comments on the desktop.

You will notice the lack of an Amiga DOS is no longer, but we felt that the current part English version is not quite "English" enough for an English language magazine to cope with. *AmigaFile* will carry a complete version when the full English version is ready. Who knows, we may add it for inclusion in the *AmigaFile* pages of this magazine.

Starting in AP#4 is a new regular MIDI page headed by Owen (Pug) with contributions from Robb Turner-Caines (of Cobain CD fame). There is even a new Music in MIDI section to help all you budding musicians. Also in AP#4 is the concluding part of the Positive Image review, the second instalment of Adam Posen's PIV Tutorial Encyclopedia a multi-media CD Encyclopedia that can be run on Falcon using software from Screen Solutions plus lots lots more.

AmigaFile is a HTML based HTML magazine based on our web site <http://www.amigafire.co.uk/AF/>. All issues can be found there.

By e-mail amigafire@amigafire.co.uk or downloaded from 42000. Also available from most FD (Floppies or discs) from *AmigaFile* (one disk and two floppies per issue) or *AmigaFile* 11 Fenton Meadow, Withybush, West Sussex BN2 6LJ.

Colin Parker - *McMullen*

The lesson is designed to prompt you to re-evaluate your Desktop requirements. A replacement Desktop can transform the way you work with your machine.

Under some system circumstances it's easy to replace the Desktop. Simply run the replacement Desktop application at bootup or launch it from the task in Desktop just like any other program. Some Desktops require Amiga Doctor or other tools but this is straightforward to do.

The DOS desktop works for me. It isn't broken why the hell? Yes, but all the Desktops mentioned on these pages offer features over and above the latest Falcon DOS 4.04 (Desktops they all trade functionality for memory).

Desktops have come a long way since the launch of the ST back in 1985. Our expectations are higher. Keyboard shortcuts, nippy and snappy like the market in windows.

Drop/Drag over handling between windows and the Desktop are all considered standard features and not cause together in DOS 2.0.

I took AmigaFire to get from TOS 1.3 to TOS 2.0 and if was during this era the replacement Desktop was born.

Neosoft was the first commercial Desktop replacement and it took the US and UK marketplace by storm. Dan Wiles originally wrote Neosoft because he wanted a Desktop which supported local environmental mistakes. Neosoft is still under development today and Neosoft 4.0 the current release, is still popular especially in North America.

Meanwhile on mainland Europe various desktops were under development (including RADiDisk, TaskDisk and

Central - which emerged as the programmers choice). Central features an integrated resource bar interface (GUI), called MagNet and introduced the AV-Protocol which enables the Desktop to communicate with desktop accessories (see below). Central is currently hovering just below 200K and features of an density are percentage - revolutionised it has fast growth to the compact box and slowed down the software.

With the introduction of the multi-tasking operating systems (MINT/MINT/OS, MacC/Net/Genesis) Desktops started to be mainstream aware and some fell by the wayside.

MacC included MacDisk and Genesis only worked with Neosoft as we had bought the third party programmers to include in and give us a choice. Even today Genesis only works reliably with Neosoft but the better MACDisk was soon upgraded by Dan and adapted by the MacC developer as their improved Desktop.

The story could easily have ended here except a rather mysterious called Thing appeared (using buttons to click on pixelated paints). Thing provides the core docking functions and has over tasks such as icon and icon handling, scroll painting and the management functions to external utilities - enabling users to build a customized Desktop. To enable all the external utilities to work together Thing implemented comprehensive support for the Neodisk Font and AV-Protocol.

There's no shortage of contenders offering advanced features including animated colour icons, Keyboard support (ie speed up file management), background image support and dozens of other desirable features. So we had to take a slow pull and narrow the contenders down to our "gang of four". Four 4. MACDisk, Neosoft 4 and Thing 1.0.

Neosoft would have been the 1994 contender if it was considered by far the most powerful replacement desktop program ever written - but then they would say that wouldn't they? Unfortunately as up to

AmigaFile
by the FFF

the English version didn't make much sense.

Instead of a traditional round-up style review concluding all the contractors are excellent, which they are we've decided to highlight the best and worst aspects of each. Download and let us know what priority to place on individual factors.

100

Integrates seamlessly with Gravitee. Metrics can also be used with TCM, Nagios or Grafana. Normal and click copy operations can be carried out in background tasks when running with Gravitee.

Powerful spatial application is attached to the standard InSite Application. InSite is an integrated product that offers geographic program information (GPI) data. These allow operators to set up local environmental variables and the program controls parameters that process speed and whether the program should be run in single-leading mode or a multitasking routine.

• **Resource built-in search.** This feature is not a part with the basic search, but it is a search of library. It is possible to search for the article (called "Originals") a specific library creation date or library and look for his article. Group lists can be created from search results (see below).

• You can use a desktop inventory or a SCM interface
• Full blown edition: An excellent, highly configurable tree editor
• Using the support, Groupwise makes it possible to store executable files in one location for easy reference. This avoids the clutter of Macintosh and other support files which doesn't actually serve the function it creates an alias for which launches the original file. Groups are created by dragging files/folders and assigning to a group. The manager being also offers this feature

of icons and tools in windows. Double windows are equipped with all icons needed to perform most editing tasks. There are icons to select all, switch between text and display, duplicate window, copy in parent directory, delete file and get file. Windows navigation can also be performed by clicking on the path displayed in the window title bar.

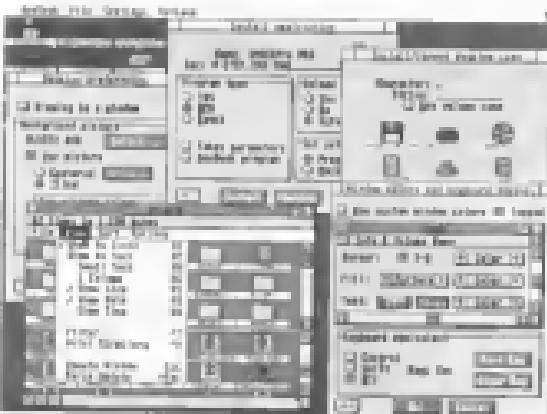
Windows can also be split into three sections and scrolled independently of each other.

- Built-in context sensitive help
- Fully configurable. Many changes and additions are user modifiable.

variable colours and font styles. You can limit the amount of memory available to `ParseDate`, vary the date format, class format options and just about every other feature you can think of.

¶ Here, we use a number of *Wesnoos* to model a multi-robot dialogue. Notice the overlap with *overlap* that links different robots by placing opposite ends of a cylinder within an empty *overlap* slot.

A Native OS/2®-like program, **Windows® PRO**, and **Java™ PRO** are required. Macintosh releases 10 and later will run without the Java program.



✓ **Macro support.** The macro recorder can be used to automate any repetitive tasks. Routinely any task you can perform manually in Word can be automated.

** Built-in re-order: Objects inside Windows can be reorganized by simply dragging them to the desired position, particularly useful for data tables.*

✓ **Dealing coins.** This can be entered directly into the dealing by any bank, state or colour. Each offers a choice of coins.

Whirlpool: If you use the Whirlpool Control Panel, you can have a corner block cage lock indicator and more. There's even a pistol grip remote supplied.

Autodesk's *3D Studio Max* and *3D Studio* (both by Autodesk) let you type the name of the desired file and *Reactor* starts selecting objects which match the entered characters. *3D Studio MAX* and *3D MAX 3D Studio* also provide a *Find* tool for

Homogenized interior: Low-order basis in H^1 (Moesni's interface basis); standard

Booklets on three labels. It's odd like desktop with the most powerful built-in font editor exists in displaying three labels. Icons typically replace text so bring forced to have a single screen every. Sale and additional page numbers when when

1

7 Modular Thing can add external programs to Fuzzy and some tanks. The author didn't note the point in re-implementing the wheel as you're left to specify your preferred utilities to view list, print files, search, format

other, and develop noisy, parolees. Parole is and can TOS programs as a window of opportunity for rehabilitation. Also available are Womack and McGehee,

calculator to calculate the total value of **Estimated function key support**. Using the **[Shift]**, **[F1]**, **[F2]**, **[F3]** and **[F4]** keys in conjunction with the function keys all slots are available to launch programs, open files, switch screens etc.

Tools menu: Up to 10 Group files programs files or folders can be added to the drag down menu and assigned descriptive tree labels. Mac and Macintosh offer variations of this menu.

✓ Accessories can be loaded and unloaded on the fly under Magic. Double-clicking on any charting accessory installs the program in the Charting accessory drop-down menu.

Programs can be resized by selecting any entry with the [Control] key held down. **MACCheat** allows the user to:

- Painted icons and hot keys window navigation. The painted icon provides



✓ **MacOSX** current from early Mac OS and OS X initial release is well worth a second look. The preferences are tucked away in a single pane displayed below the main menu above the system objects contain almost programs

✗ **Mac OS**: This version is even more or less entirely serving using Mac OS X.

✓ **Long filenames** support is **BS** disastrous. Mac OS X supports long filenames up to 256 characters including space characters. Thing does support long filenames.

✗ **Accessories** can be located and removed on the fly under Mac OS.

✗ **Drop/And/Drop icon assignments**: icons are assigned using Drag/Drop within between the icon application along with a window containing the available icons.

Mac OS X supports it's icons on leaving the dialog and only contains memory for located icons.

✓ **Open file of recent files**: first setting displayed in the menu bar to right of file menu. Now the icon is highlighted a caps lock indicator and other instances would be useful.

✓ **Change resolution on the fly**

Under Mac OS using CHGRES PING this works.

✗ **Symbolic links** (Alfreds): These are the equivalent of Thing and Macintosh Direct files but often more flexible as they can be placed anywhere. To create an alias hold down the [Alt] key and then Drag/Drop the file to its destination. Mac OS X support is not temporarily disabled in the Preferences dialog otherwise it doesn't work. Aliases can be distinguished from "real" objects because the icon label is italicized (it only works with Mac OS X). Effectively model objects. Most dialogs are model which means you have to set the dialog before doing anything else. The Format and Copy dialogs

which wanted to include one of the system 3D stamps but because they are model we had to choose between a dialog and the file tree pop-up, which is unique because the selected file is entirely random.



✗ **Icons**: icon model, presumably to support Mac OS background DMA file operations.

✗ **Limited window navigation**: There are no buttons designed to navigate between or message windows.

✗ **Shadowed in the Update menu**: Update with just it's self. Every other modern OEM program uses the file menu to run.

✗ **Limited configuration**: All the buttons are there but it's in the power manager compared to the other desktops. On the other hand it's very easy to set up.

✗ **Creates lots of temporary windows**: either all the windows display icons or all the windows display text. All the other desktops can mix and match.

✗ **Cannot take desktop objects**, icons dragged to the desktop retain the full filename and cannot be renamed independently of the original object. All the other copied and pasted icons retain their labels.

Buttons

✓ **Drag/And/Popups**: This feature is unique to Mac and provides an easy way to navigate around your filetree hierarchy by clicking and hold over any drive icon and after a delay the File Tree pop-up appears.

✓ **Can select objects from more than one window to manipulate**: Normally selecting an object in one window deselects any selected icons in other windows.

✓ **Accessories** can be removed on the fly by holding down the [Control] key when selecting the accessory.

✗ **Breaking colors**: Double clicking on the Menus icon display the Menubar for up to five lines of text using any font, size or color. A variable width border in any colors can also be added.

✗ **All 3D look interface**

✗ **Tools in window status bar**: Mac includes three status tool icons in each Windows status line, a close always leaves an icon which toggles between tool/tip mode display and an info-mac icon which aquires tool to easily display the contents of the window.

✗ **Build-in icon editor**: The icon icon editor can load and save attached resources (RC) files. Basic editing tools are included. Macintosh also includes an icon editor.

✗ **Requires icon filters**.

✗ **Show/hide file handling**: On Mac OS X file filtering is a considerable delay before the Desktop appears especially when changing resolution. Even though the built-in icon editor can load and save standard RC files it starts with its own CFF language files.

✗ **Can't change resolution on the fly**

✗ **No long filenames** support. Coming in Mac OS X allegedly.

✗ **Modal dialogs**: Once an Mac dialog is opened the system is blocked until you exit the dialog again - bad news for a Desktop in a multi-tasking environment.

✗ **Advanced image handling**: To load a background image file has to be renamed with a specific extension dependent on the colour depth and placed in the Face directory. Other desktops can load a background image from anywhere via the file selector.

✗ **Non-standard iconification**: instead of a standard window icon in the window title bar Mac offers an iconize option in the Window menu which places an icon representing the window on the Desktop. This icon remains even after the window has been reduced and has to be deleted manually. ♦

Creative Calamus

By George Bradford



Creating Simple Graphics With Your Calamus Tools.

Sample clipart is offered through many sources, but for those of you who feel that you would like to add to your collection, here are some easy-to-build Calamus creations that you can make yourself!

The majority of the samples shown here use very simple circle and square techniques, which means you can build them on the spur of the moment, or make them in your spare time and put them on file for future use.

In some ways, the simpler the graphics the more effective it is, and in these examples you will find that most of them require very little effort. The Camera in Figure 1 is a perfect example of this. A series of simple round centered rectangles, some lines, and some circles. How much simpler could it be? The Present in Figure 2 is even simpler, except for building the box from heavy white curved lines fitted together. Figure 3 is a stylized envelope built with two horizontal triangular shapes lapping each other with one set to background. The Crucifix in Figure 4 is a series of shapes and lines, with the longest part being the join between the black and white parts of the stem. The line for the base was given rounded ends by selecting them in the "Lines" menu.

Figure 5 is a simple Star of David, made from two equilateral triangles, one lapped over the other. The Pot of Gold in Figure 6 figure is simpler than it looks. A large oval for the main body of the pot, with the white bars to flatten the top and base. Add a round ended black rule for the rim, and shade a batch of cone circles in behind this. A few angled lines to make up the 'heat' effects, then two small circles for the legs, and you're all done!

The Path in Figure 7 has endless possibilities and can be stretched or compressed for whatever effect you have room for. A series of triangles for the fin, an oval for the body, a circle for the eye, and a line for the mouth. The Cutlery in Figure 8 gives a very clean effect, and it ends up made of round-ended white lines, with an oval added for the spoon. With the Ice Cream Cone in Figure 9 a crosshatched "pattern" was chosen for the fill in the cone triangle. The scoop circle on top is a 12% screen fill with a bold 25% border.

The second group of objects must start off with a giant Teddy Bear head as shown in Figure 10.

You will immediately see the simplicity of this design, made up almost totally of circles. Naturally the body, and appendages of the critter could easily be added using a similar approach, with thick round-ended lines for the arms and legs. This body can be either at an angle as shown, or upright, if preferred. Figure 11 demonstrates the use of heavy round-ended rules and several screens to simulate Drag Capsules. In any arrangement, you might require. The Butter or Water in Figure 12 shows a little more class, but simplicity overall. I used overwheight rules on a vertical rounded centered rectangle to produce the short curves, but a short 30% round ended rule would accomplish the same effect. The shoulders were capped off at an angle with white triangles, and the rest is obvious.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9



The cloud effect in Figure 10 is a bit time demanding, and the real problem here involves logical grouping and need to 'break' commands, in order to keep the numerous shapes under control. I eventually built a red white frame with transparent corner opening and used this for the final cropping mask. The Wind-up Mouse in Figure 11 again will speak for itself. Actually it was a 'piece of cake', or should I say 'a piece of cheese'. The most difficult of all was the Housing Project in Figure 15. This has much the same approach as the clouds in 10, but keeping the rooftop angle under control is quite tricky. Naturally the copy area at the top is open to any treatment you wish to make.

The Rose and Leaves in Figure 16 are so simple and effective that you wonder why you never thought of them before, and again speak for themselves. Figure 17 is a great little Christmas Tree made from simple triangles, circles and curved white lines. The trunk and stumps are rectangles, with white triangles used to top off the angular sides of the root. The Dessert offering in Figure 18 looks complex, but really adds up to a series of ovals with white borders. A round ended bee was again used for the rim of the desert bowl, and a curved line for the cherry stem.

Once you have tried making a few of these simple geometric shape style graphics, you will realize just how practical it is, and you would be wise to keep your eyes open for others of this ilk. There are hundreds of them out there, and what I show here is just enough to get you started, and build your confidence. Again, working at at least 400% enlargement for the finer details will ensure precise fit on delicate areas.

This article first appeared in Issue 14 of Galamus User and has been included in the new issue to stimulate production and will be available in early January.



Figure 10



Figure 11



Figure 12



Figure 13



Figure 15



Figure 14



Figure 16



Figure 17



Figure 18

Atari Computing Subscription Form

Subscription	UK	EUROPE	USA	OTHER
3 issues magazine only	£19.99 <input type="checkbox"/>	£21.99 <input type="checkbox"/>	£22.99 <input type="checkbox"/>	£23.99 <input type="checkbox"/>
3 issues with Reader Disk	£25.99 <input type="checkbox"/>	£27.99 <input type="checkbox"/>	£28.99 <input type="checkbox"/>	£29.99 <input type="checkbox"/>
6 issues magazine only	£39.99 <input type="checkbox"/>	£42.99 <input type="checkbox"/>	£42.99 <input type="checkbox"/>	£43.99 <input type="checkbox"/>
6 issues with Reader Disk	£49.99 <input type="checkbox"/>	£52.99 <input type="checkbox"/>	£52.99 <input type="checkbox"/>	£53.99 <input type="checkbox"/>

All prices in Sterling. Please send me Atari Computing starting with issue _____

Name: _____

Street: _____

Town: _____ Postcode: _____

Country: _____

Telephone: _____ E-Mail: _____

Enclose a cheques/postal order (UK only), Sterling Eurocheque/Post Office payment (Europe), Sterling Post Office Payover/International Money Order (Commonwealth) or an International Money Order (Rest of world) for £_____ Please make all funds payable to "Atari Computing Group".

Data Protection Act 1988. I consent to The Atari Computing Group holding my subscription record on computer. I also consent to this information being disclosed to other members of The Atari Computing Group. I understand my entry is liable to inspection under the provisions of the UK Data Protection Act 1988.

Signature: _____ Date: _____

Return this form with payment to: Atari Computing (Subscription), 75 Beeston Lane, TROON, Ayrshire, KA10 0HZ, Scotland, United Kingdom.

If you have a magazine only subscription and want to receive reader disk as they are released you can now upgrade your subscription. Fill in the form tick the box below and include a cheque for £2.00. Upon receipt we will send you reader disk 1 and 2. Reader disk 3 will be dispatched with issue 3 of the magazine.

Photocopies or
details written on
plain paper are
acceptable.



Open Software Interchange System
A graphical editor system that runs
on some OASIS software -

**Atari
Macintosh
and other computers**
No more software porting

Supersoft Digital Logic, Inc.
8200 University Rd.
Vancouver, BC
Canada V6A 5S7
Phone (604) 564-0400
Fax (604) 564-0575
E-mail: osmsoft@vancouver.com
Web: <http://www.osmsoft.com/~osmsoft>

The Interactive Textbook

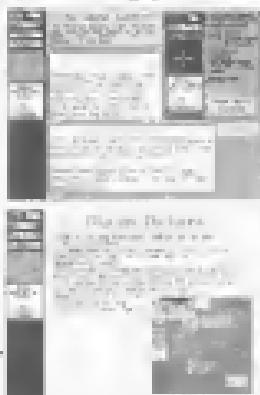
Multi Media Literature & Studies Authoring System

Interactive Author & Interactive Reader
It A & IR 1.0, integrates a software system that enables shaping based literature and educational curriculums. Interactive Textbooks (I.T.)
Designed around the many advanced features of the OASIS system, I.T. makes it simple to create and edit an Interactive Textbook.

In I.T. consists of a collection of files such as the "pages", the "page", and the individual page, with image files. The format permits I.T. to automatically call up and run various other software applications to create and edit page icons. Page icons can include: Word, Pictures, Sounds, Movies, Slide shows, Presentations, Page "Hot Spot" Buttons, and Student Evaluation Quizzes.

Interactive Textbooks can be used for research management, reference and orientation material and educational curriculums for self-paced studies, with student tracking.

Interactive pricing detail
Canadian Systems: Cdn\$199.00
Non-Asian U.S.\$199.00 Cdn\$219.00
Non-Macintosh U.S.\$199.00 Cdn\$219.00
(U.S. Macintosh through Power Macintosh)
Please add £7 for shipping
Call for Brochure



£7.00 Page Shipping (U.S. residents and
McIntosh/Power Macintosh customers)
or up to 1 Page Shipping area. Total £7
Shipping £1.00 is included in the postage

UK Delivery PO Box 373 Aberdeen Scotland UK AB15 8UL
Flagship Tel/Fax 01224 370700

To address: £1.00 Sterling,
£1.00 DM by £2

QUESTIONS ANSWERS

New Extract Long Filenames

Q I have downloaded some ZIP files from the Internet, but the files they contain have long Unix-style filenames, causing me a headache of grief when I try and extract them. I'm using MagiC 4.4. Is there any way to extract them to "normal" Mac filenames?

markcamp@mac.com (markcamp)

A You could upgrade to MagiC 5.0 which supports long filenames (although I have heard to be a few conflicting reports with this feature). Alternatively you can install the additional ZIP file which supports long filenames under MagiC 4.4 and make sure that the destination for the extracted files. Now you can rename the files in the ZIP file to Unix-style and move them onto your file.

Martyr Dryden

Hyper Mastercheck

Q I use Pageman for most of my web and FTP work, and am wondering if there is any way to move frequently used elements such as text, banners, tables from clip art libraries into documents? Pageman does allow me to import and/or RIS files which I can import into the new document but I can't see the entire and graphical elements I want to import to following from scratch, banner and link then generating the same text and clip art over and over again?

Andy Page - Tumworth

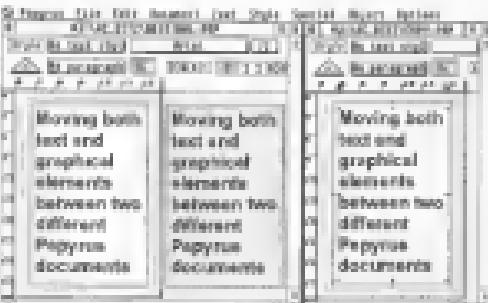
A There are some underutilized Pageman features which do just that. These are two similar procedures for copying within the same document: the other to copy

elements to another document.

To duplicate elements within the same document: Load the target document and set the status setting to Whole page. Notice the grey clipboard area to the right of your elements. Select the arrow tool and draw a selection box around the elements to be duplicated which selects them ready for manipulation as a group. Draggy the elements, hold down the [Left Shift] button then click and drag the selected items to the grey clipboard area. To move elements click [Hold the [Left Shift] button down]. Now move to the location within your document to paste the elements in. Again select the elements in the clipboard area and holding the [Left Shift] button down, click down into position.

Copying elements to another document is basically the same procedure. Load your original document as above, and open another (new or existing) document. Arrange the screen so both windows are displayed side by side, don't try overlapping them or skipping windows. Then follow the steps above.

Mike Kornblau



As an aside, get accustomed to Pageman before making attempts to be copied between documents and the clipboard.

HD-Driven and MagiC

Q I recently took the plunge and installed MagiC 5.0 on my iMac G4. Since I have the experienced corrupted files I'm using the latest HD-Driven software what's going on?

A Since v4 (LU) MagiC has supported "Background DMA mode" when used in conjunction with the HD-Driven software. This can dramatically improve multitasking but should only be used if all of the drives on your Mac do not support background DMA mode. This includes drives for your hard drive, CD-ROM, tape, streamer, scanner, SLM printer and so on. If in doubt you must switch background DMA off. Newer SCSI and IDE drives for the SLM604 and SLM805 are examples of drives which do not support background DMA.



Much of the trouble using background DMA occurs during boot. Fortunately there is a handy trick which can be used to make things much more fluid. Edit your Macintosh: me to remove the #DMA line. This involves all pre-existing multitasking during the boot sequence. Then if you have the HD-Driven CPU set to use preemptive multitasking it will be automatically switched back on again when you reach the desktop.

Recent versions of MagiC have also included a program called WEBDEMOM which enables write caching to a spread disk section. Think carefully before enabling write caching - data is held in memory for a while before writing it to disk so a system crash or power cut can be disastrous. In a word, use it at your own risk!

Background DMA mode is held in memory for a while before writing it to disk so a system crash or power cut can be disastrous. In a word, use it at your own risk!

Conrad Korn

Our team of experts are on hand to investigate and solve almost anything you can throw at them. Send your letters to: *Atari Computing Q&A*, 10 The Mount, Colchester, Essex, CO4 5LL, England. Or email them to expeditor@compuserve.co.uk. While we will do our best to answer your question within the pages of *Atari Computing* we cannot enter into individual correspondence.

Handle File

 In partial reply to T Yusuff's letter in *Atari Papyrus* and *Outsite* certainly the work together - I printed this letter using the standard Papyrus as a file Outsite in v3.11 running on a 386 Falcon running Magix v4 and print it.

Outsite is set up with the page size set to 1024x640 of alternative memory in RAM and Compatibility Mode switched on. This seems to make for a reasonably fast and stable system with most software. Occasionally upon loading a document Papyrus runs it in out of memory, but then goes ahead and loads the document anyway and doesn't complain again.

I did initially have some problems with system crashes whilst printing but this was solved by increasing the printer buffer to 32 KB. This removes Papyrus from the memory free virtual RAM rather than ST RAM where things may go right.

Martyn Tidd, Croydon

TOS v1.1 bug update

 In *Atari* you answered R S Chesser's question regarding his problem with TOS 1.1 could not run in medium resolution. One of the vital info you wrote was to edit the 10850.TOS file and change the line #C 16 11 to #C 16 12. This didn't change anything because when you run dosbox in medium res on TOS 1.1 you will get a font looking like #C 16 12. Much thanks to the TOS bug

re-bugs into low resolution. The next solution is to make allowances for the TOS bug and edit the line to #C 16 13. Now after a reboot the screen will be in medium resolution. #C 16 11 - Low res #C 16 12 - Medium res #C 16 13 - High res.

Jonathan Thorburn, Swindon, via the Internet

Missing menu

 My mouse pointer occasionally disappears yet keyboard control still works in there is any way to solve the pointer without rebooting?

Mike Chester, Redhouse

 Under TOS you can reset the mouse pointer using the key combination [Control]-[Left Shift]-[Altshift]-[K] (Keypad 1). Alternatively attaching a floating accessory (overhead 8 arms) sometimes does the trick. Hopefully these other solutions will prevent a few of your floating locks. :)

Barrie Stansbie, A1C1G

Falcon problems

 I've been having problems running some programs on the Falcon. My normal screen resolution is 640 by 200 or 16/256 colours but some programs such as CGIMP and Easy Type only expect 4 colours in this resolution. Is there any way to get them to run without having to switch to ST mode resolution?

Steve McDonald, Abingdon

 Use the Change video option in TOS to change to 8 colours, 80 columns, 256 colours, and most programs will attempt to use their same resources (yes indeed! Not all programs will work but it's certainly worth experimenting). Martin Williams, A1C1G

Keyboard confusion

 My Falcon's keyboard is set up incorrectly with various keys producing the wrong characters. It was purchased secondhand, and I didn't receive any special software with it.

Peter Parker, St Ives

SPEEDY GONZALES

 I have a 386SX 20MHz with 16MB RAM and a 100MB hard disk. I'm a Falcon keyboard manager programmed by Pascal Frelach and would like know if the current movement goes into the PROSPEC CPU's keyboard editor and not the following constants:

#1 312

#2 3

#3 0

And here is the script, which in the graph, to get the script the parameters and display the resulting curve. New user! CR and LF are Other Stilfes, via CTX

 What you want is a rate table CPS module programmed by Jim Goss called

Kin 1040 CPS. This allows you to change the settings stored in your Falcon's NV-RAM (Non-Volatile Random Access Memory). Your keyboard is probably set to a USA one as using this CPS to select a UK keyboard. You'll need to reboot once you've changed the settings, but the values will be stored permanently thereafter. You'll also notice that you're mouse height will be reduced but you can change this by turning off the PAL mode setting in the CPS and rebooting again.

Warning! Don't change anything you're not sure about or your Falcon might not reboot properly.

Martin Williams, A1C1G

Drives to corrupt

 I recently added a second hard drive to my system and copied many files between partitions and to floppy. Several weeks later I discovered lots of corrupt files. It is possible to copy from either floppy drive to one of the hard drives without corrupting providing only one drive is actually spun-up? I now only use the system with both drives spinning together but would like to know what is causing this corruption and how to stop it. My system uses the Translation Selectable boot adapter to interface with the drives.

Richard White, Somerton

 There could be a number of reasons why this corruption is occurring. The most common is known as SFI but corruption. Some ROM drivers are internally terminated with routine packages called SFIs (Single Function

MODEM INITIALISATION



Some machines cannot recognise an international dial tone. This can be happen for various reasons. For example, in the UK, if you have Call Diverts set up, it then happens change the speed and string from AT&T to AT&T&T. This tells most Hayes compatible modems not to look for a dial tone and to dial anyway.

Barrie Stansbie, A1C1G

Perhaps whereas others use an external transmission which plugs into the camera's SCSI connector on the device and can easily fail to spot it is essential only the device physically at the end of the SCSI bus is terminated and that it has either internal or external termination but not both. After elevating and eliminating this reason the final most likely cause is a faulty cable between SCSI and a faulty Transistor. The easiest way to check for faulty resistors is to substitute them - a local user group meeting is the best place. Solutions can check out your Transistor and resistors themselves if you open a sealed device will investigate more seriously.

Human Read AIDC

Datenbank-Informationen	
NAME	REDACTED
FORMAT	REDACTED
SIZE	REDACTED
LAST BACKUP	REDACTED
COLLATION	REDACTED
STATUS	REDACTED
OWNER	REDACTED
CREATE DATE	REDACTED

卷之三

Q I currently have a Falcon with an external SCSI to IDE drive (see 111). Put a big PC IDE internal drive inside it? Add a SCSI internal/external drive externally and if I could do this, would I need any further hardware?

Fontenay-aux-Roses

A You could do either. (1) You could put a larger capacity 2.5-inch PC internal disk drive into your laptop. There isn't room inside the case for the larger 3.5-inch PC drives but you can do an adapter card and boot. (2) You could take the case and power it using an external power supply. Ideally housed in a proper case.

3) This is easier option. Add a SCSI drive in preference to an IDE drive because it can plug directly into the below SCSI 2 socket. This may also help to consider recording several external devices in a stacked (lower one and connects them to your drive using the SCSI-interface adapter (IDE Control in Nexus is fine). Finally, if the drive isn't terminated you'll need a plug in SCSI terminator.

Mark Miller, BICIG

Reprinted with permission

Q Can ZIP drives be used with AHD-1? I use other slower software such as ICD or HD-Drives. I get 30MB raw read errors and the HD shows up. I had the first 30MB stuck down in my Policies by Acer last year but the revised model performed because my monitor was out of warranty. And I'm wondering if this is the problem? I'd really like a ZIP drive but also I need to purchase one unless I can get a driver to work with it suitable.

Barry W. Howard, Ph.D.

10 of 10

第 2 页

Q I sometimes when loading a web page containing graphics the translate browser pad. Define completing the translation. These are usually PDFs. I usually press the Esc key to cancel loading the page but I'm wondering if there's a better solution. The behaviour is erratic at best.

Almost every time I play with long enough that last block will be transferred, you need a little more patience. Sometimes a known cause may resolve after a delay of a minute or two? There is a new "X" command [Control+R] which can get the transfer going again in most, but not all cases. There is one situation which consistently prevents file corruption on a long pause. If you transfer a stack transfer presented as an

1. Make a note the position where the controller fails
2. Wait 15 seconds to allow for internal server checks
3. Press [Control] & three times in quick succession (each or twice at a time is equally effective)
4. If there is no flash on the modem a 'NO' LED goes to sleep
5. If there was a flash on the modem a 'NO' repeat steps 2 and 3
6. Wait another 15 seconds in case the network reassociates to the link

- 7. If transfer will break give up and press the **Esc** key
- 8. If it is not important to view the page give up
- 9. If the page is important try clicking the **Retain** button
- 10. If the new transfer gets stuck at the same position for the same file you've hit the **Esc** key and transfer will always fail or give up. If the transfer of file succeeds different repeat steps 1 to 10 again until the transfer is successful

Received 10 January 2002; accepted 20 March 2002

ADVERTISERS INDEX

BBB SOFTWARE - 81
1 Perfect Answer Systems Inc #10, 104-1030 102A
Tel 604 520-3000

BBB SYSTEMS - 80 & 83
133 High Street, Burnet Park, 6021 87W
Tel 604 524-7349

BBB SERVICES - 82

Locate Company, Locate New Street,
Locate.com, 6021 11F
Tel 604 524-7349

BBB SYSTEMS - 83
19999 88th Avenue 100-10211
Colombia 6020 - 81
Tel 604 524-7349 and 604-524-7349
Fax 604 524-7349

BBB SYSTEMS DIRECT - 83 & 85
1000-21 Street, Edmonton, Alberta, Canada,
T6C 1G1
Tel 403 455 7349

BBG INDUSTRIAL DIGITAL LOGIC INC. - 84
1011 Avenue Rd., Victoria, B.C. Canada, V8A
5B7
Tel 250 412-5000

BBT CLUB - 83

70 1st St. NW, Washington, 20004 7005
Tel 202 347-8200

BBY FLOWERSHOP - 83

70 10th St. NW, Washington, 20004 7005
Tel 202 347-8204

BBYMARKET - 8
11 Central Drive, New Bay, Leslie, Langley,
Surrey, BC, V3A 2B6
Tel 604 520-0200

BBY INTERACTIVE - 83
10 100 West, Vancouver, 100-102

BBYD - 83

101 10th St. NW, Washington, 20004 7005
Tel 202 347-8204 or 10 102 1000-01

BBYD SYSTEMS - 83
17 18 10th Street, East, Dulwich, London,
SE1 8HS
Tel 0181 403 2220

BBYD SYSTEMS DIRECT - 84
10th Street, East, Dulwich, London,
SE1 8HS

BBYD SYSTEMS DIRECT - 84 & 85
10 10th Street, East, Dulwich, London, 100-102

999 Software

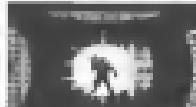
ALIEN THING Awarded 84% in ST Format issue 79. Complete with expert levels and the source of the game supporting the Jaguar version. Now only £9.99 including UK post & packaging. (Or ordering from outside the UK, please add £1.11). All purchasers of Alien Thing will be offered attractive discounts on future games released by 999 Software.

Coming in the next few months: The Director's Cut (the sequel to Alien Thing 3D) featuring more complex, more levels, more puzzles, trickier maze. To receive a demo of the game, send £1 in money or postage, etc.

Write to:

999 Software
1 Portland Avenue
Burton on Trent
Staffs
DE14 3GD
Tel: 01283 500946

Alien Thing 2 is the next 3D adventure will be Megabeans, a space-sweeper game with several differences. Solar War 2 is a space shoot-em-up for the Falcon, and Mortlock is a graphical adventure game set in a real castle, also for the Falcon. For more information, point your web browser at <http://www.computer.co.uk/~999Software>



The Abari A - Z

by Mark S Barnes

A simple alphabetical list of many items, a reference for responses and support, along by people of power within, creating and their environment.

This is a fast-loading text section with unique character entries by a long time tester.

- All my software references
- 1000+ characters listed
- 1,000 items, some including programs
- 1000+ entries of which characters
- Over 100,000 words

The cost £1.99 + £1.00 P&P (UK) £3.00 Europe £5.00 USA/Canada £7.00/£8.00 Australia £11.00. Please add £1.00 for each CD. Money order, bank draft or bank transfer for £100.00 in £5.00 notes.

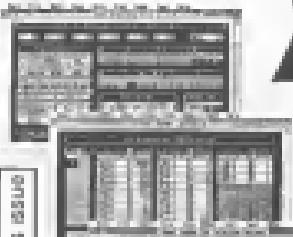
International £1.00 in £5.00 notes for better rates
Bankers: Company Bank, Chesham, Bucks, and for
Poste Internationale, Geneva, Switzerland, Germany, and France



65 Mill Road, Colchester, CO4 5LJ
<http://www.cix.co.uk/~inactive/>

Available from all good PC
Libraries or send Disc + £4.00
to 8 Brookside, Bingley,
LE11 2TL. Email

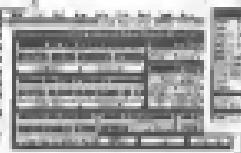
mark@the-dl.com or
visit www.dl.com.



See review in this issue



The Best UK National
Lottery program
available for the Atari



Registration £1.00 or £10.00 for 6
or 12 months support. £5.00 or
£20.00 if you include your own
disk and stamp. Cheques payable
to M. Barnes and send to 8
Brookside, Bingley, LE11 2TL.



FALCONRY

The Art of Mastering the Bird

Afterburner

The fastest Falcon accelerators. Can produce an average speed increase of up to 40 times on selected Falcon, and well over 50 times when used with Phoenix.

- 48MHz processor 14400/14404
- 28128bytes of memory
- Digital expansion up to 64MB
- Expansion through port

Nemesis

Integrated Falcon accelerator to boost the Falcon's performance.

- 24MHz bus and CPU
- 48MHz DSP core (option)
- Optional 64MB DRAM upgrade
- VGA resolution up to Falcon/24 true colour with Phoenix!

Particularly useful when used with any of the APEX series of programs, but especially beneficial for virtually all Falcon software.

Nemesis £49.95

Express

The most popular - and big seller. Offers high resolution, fast colour, real time image capture direct from VCR or camcorder.

- Capture rates up to 1000x500, 24 bit
- Resolution up to 320x240 (1725)
- 200fps sequential capture (1280x1024)

Includes FullColor Video, Falcon 24, VCR-TV
Expander £279.95

Falcon 14ME

Our latest Falcon upgrade is supplied as a complete 'plug and go' system - no soldering, simply replace your existing memory board. Call for latest prices!

MK.X Cases

Superior replacement, Delux-style cases for the Falcon. An essential accessory!

Price: £199.00



APEX Alpha

Scanning image processing program, with the Falcon's real time video system, delivering an unprecedented level of performance.

- Full 24 bit real time image editing
- Real time zoom to any level of detail
- Auto-located (full image) real time image registration
- Real time Alpha channel from 8 pixel operations (8 bit shading)
- Variable options on grayscale and mosaic
- Adding/erasing key range masking
- Compound (multiple) Mosaic using a real time frame

With Nemesis and Velocity, APEX Alpha can generate resolutions exceeding 2200x1024 in full frame capture on standard VGA monitors.

APEX Auditie

New APEX development for professional media users providing fast waveform editing and manipulation and DVD recording.

- Extremely fast real time CPU operation
- Full 24 bit sampling capability
- Microphone enhancement technology for high quality audio
- Real time record and playback accepting of any sample rate from 400Hz to 10MHz
- Record to Disk sampling
- Real Time Editing
- Waveform generation Studio

ESS Debug

The easiest and safest way to develop Falcon programs. A host of features.

ESS Debug £39.95

APEX Series, Nemesis, Velocity & ESS Debug are all
© Falcon Software

APEX Media

The innovative animation program, which the Falcon drives by itself. Now being released at £2.2. Having full compatibility with Afterburner, it is a new version of APEX media (available from now on) with enhanced real colour operation with Nemesis.

With more to be said about the most advanced program for the Amiga Falcon!

APEX Media £29.95

"NEW" Velocity

Another essential Falcon utility for increasing screen resolution, now improved that of the original Falcon. Velocity is the stand support for Nemesis and APEX Alpha for providing high resolution colour output required velocity really quickly. Velocity is equally valuable for standard Falcons.

Velocity £14.95

Please Note:

APEX Auditie and APEX Alpha are due out later this year.

Further details from:

Titan Designs Ltd

8 Whinfrey Way, Sally Oak
Birmingham B29 4AD, UK.

Tel: +44 (0)121 669 6668
Fax: +44 (0)121 414 1839
e-mail: 10000 2500@compuserve.com
Web: <http://www.titan.com/ess/>

All prices exclude VAT 10.0%. Prices and specifications are change without prior notice.